

The Administration of Laboratory Schools

*A Study of Laboratory Schools Connected with Departments,
Schools and Colleges of Education in
State Universities*

By

ARTHUR M. JARMAN

Ann Arbor Michigan
1932



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ARTHUR M. JARMAN

A dissertation submitted in partial fulfillment of the requirement for
the degree of Doctor of Philosophy in the University of Michigan

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TABLE OF CONTENTS

ACKNOWLEDGMENTS

CHAPTER I

INTRODUCTION	1
Statement of Problem	
Scope of the Study	
Sources of Data	
Procedure	
Definition of Terms	
Value of the Study	

CHAPTER II

TYPES OF LABORATORY SCHOOLS	6
Distribution of Types	
Trends as to Types	
Summary	
Suggestions for Administrative Guides	

CHAPTER III

ADMINISTRATION OF DIRECTED TEACHING IN COOPERATION WITH PUBLIC SCHOOLS	12
Types of Cooperative Arrangements	
Contractual Relations Between State Universities and Cooperating Public Schools	
Cost of Maintaining Cooperative Relations	
Personnel Management in Relation to the Cooperative Program	
Functions of Cooperating Schools as Laboratory Schools	
Administrative Difficulties Involved in a Cooperative Program	
Summary	
Suggestions for Administrative Guides	

CHAPTER IV

THE ADMINISTRATION OF UNIVERSITY HIGH SCHOOLS	39
Functions of the University High School	
Organization	
Administrative Procedure and Personnel	
Teaching Personnel and Related Problems	
Pupil Personnel of University High Schools	
Clerical Assistance in University High Schools	
The Status of Programs of Studies of University High Schools	
Efficiency of Instruction	
Student Teaching and Related Problems	
Other Functions of the University High School	
Related Administrative Problems	
The University High School Building	
Cost of Operation	
Summary	
Suggestions for Administrative Guides	

CHAPTER V

FORMULATION AND EVALUATION OF ADMINISTRATIVE GUIDES	103
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CHAPTER VI

ORGANIZATION AND INTERPRETATION OF ADMINISTRATIVE GUIDES	120
The Laboratory School System	
The University High School	
Cooperating Public Schools	

APPENDIXES

APPENDIX A	131
State Universities and Other Institutions Included in this Study	
University High Schools Connected with State Universities	
Public High Schools Located Near State Universities with which University High Schools Were Compared in Chapter IV	
APPENDIX B	133
A Study of Laboratory Schools Connected with Departments, Schools and Colleges of Education in State Universities and Colleges	
A Study of Laboratory Schools Connected with Departments, Schools and Colleges of Education in State Universities	
Copy of Letter which Accompanied Questionnaire to State University Officials	
Copy of Questionnaire which Was Mailed to Superintendents of 37 Public School Systems in which Student Teaching Had Recently Been Done	
APPENDIX C	140
Guiding Principles for the Administration of Laboratory Schools Connected with Education Departments of State Universities	
Copy of Letter Mailed to the Ten University High School Principals Who Assisted with the Evaluating of Ad- ministrative Guides	
Deans, Directors and Principals Who Assisted in the Evalua- tion of the Tentative Administrative Guides	
APPENDIX D	149
List of Publications Used in the Construction of Table XIV	
APPENDIX E	150
State Law Providing for the West Virginia University Dem- onstration School	
Mississippi State Law Providing Means and Methods for the Uniform Operation of Demonstration and Practice Schools	
BIBLIOGRAPHY	154

LIST OF TABLES

I. Types of Laboratory Facilities Provided by Education Departments in State Universities for Teacher Training Purposes	9
II. Preference of Principals as to Type of Laboratory School ...	11
III. Cost of Maintaining Cooperative Relations	20
IV. Means Used by State Universities for Remunerating Cooperating Public Schools, or Public School Personnel for Teacher-Training Privileges	22
V. Official Rank Provided by State Universities for the Administrative and Teaching Personnel of Those Public Schools Cooperating in the Teacher Training Program	23
VI. Officials Responsible for Supervision of Student-Teaching....	24
VII. Officials Responsible for Assignment of Student Teachers ...	24
VIII. Conferences with Student Teachers	25
IX. Extent to Which State Universities Have the Privilege of Conducting Experiments in Connection with Cooperating Public Schools	27
X. Restrictions on Cooperating High Schools With Respect to Use of State Adopted Curricula and Textbooks	28
XI. Influence of the Teacher Training Program on the Administrative and Teaching Personnel of Thirty-Two Cooperating Public School Systems	31
XII. Influence of Student Teaching on Efficiency of Pupil Instruction	33
XIII. Average Time Consumed by Student Teachers Going to and Returning from Directed Teaching	35
XIV. Functions of Laboratory Schools as Indicated by Official Publications and Professional Literature	39
XV. Grades in University High Schools	42
XVI. Officials Responsible for Determining University High School Policies	45
XVII. Salaries of Principals of University High Schools and City High Schools Located in the Same Community	48
XVIII. Comparison of Qualifications of University High School Principals and Principals of Public High Schools Located in the Same Communities as Indicated by Sex, Degrees, Professional Training and Experience	49
XIX. Academic and Professional Training of University High School Teachers and Teachers of 18 Public High Schools Located in the Same Communities	51

XX.	Percentage of Teachers of University High Schools and Public High Schools of Same Communities Teaching in Their Respective Academic Majors and Minors	52
XXI.	Previous Experience of University High School Teachers and Teachers of 18 Public High Schools Located in Same Communities Expressed in Terms of Percentages	53
XXII.	Number of Classes Taught Daily by Teachers in University High Schools, Public High Schools in University Communities and High Schools Accredited by the North Central Association	54
XXIII.	Number of Pupils Taught Daily by Teachers in University High Schools, Public High Schools in University Communities and High Schools Accredited by the North Central Association	55
XXIV.	Highest Official Rank That May Be Attained by University High School Teachers	57
XXV.	Highest Official Rank That May Be Attained by University High School Department Heads	58
XXVI.	Medians of Minimum, Maximum, and Average Salaries of Teachers in University High Schools Compared With Same in Two Other Groups	59
XXVII.	Tenure of University High School Personnel	59
XXVIII.	Officials by Whom Teachers Are Selected	61
XXIX.	Clerical Assistance Provided for University High Schools and Public High Schools in University Communities	62
XXX.	Percentage of High School Enrollment in Various Occupational Groups	64
XXXI.	Subject Offerings in Twenty University High Schools	67
XXXII.	Subject Offerings in Eighteen Public High Schools Located in the Same Communities as the University High Schools ...	68
XXXIII.	Enrollments in Courses Offered by University High Schools Compared with Enrollments in the Same Courses in Other Schools Expressed in Each Case as the Per Cent that the Course Enrollment is of the School Enrollment	69
XXXIV.	Offering of University High Schools According to Size and in Comparison with Public High Schools in Same Communities	71
XXXV.	Typical Offerings of University High Schools when Considered in One Group and in Groups According to Size	75
XXXVI.	Typical Offerings of Eighteen City Public High Schools Located in the Same Communities as the University High Schools	77
XXXVII.	Efficiency of Instruction in 12 University High Schools as Determined by Standardized Tests	81

XXXVIII.	Credit Allowed for Directed Teaching in State Universities ..	87
XXXIX.	Research Studies Conducted in Connection with the University High School which Could Not Have Been Done with the Same Success in Connection with a Cooperating Public School	89
XL.	Per Student-Teacher Cost of Operating University High Schools in Various State Universities	96
XLI.	PART I.—The Evaluated Administrative Guides	107
	PART II.	115
	PART III.	118

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CHAPTER I

INTRODUCTION

THE problems involved in the administration of laboratory schools connected with departments, schools and colleges of education in state universities are different in many respects from those of the laboratory schools connected with the normal school or teachers college. Historically, the two types of laboratory schools came into existence by different routes. From the beginning, the laboratory school was an essential feature of the normal school, the forerunner of the teachers college.¹ On the other hand, while the normal schools were primarily concerned with the problem of giving prospective teachers a knowledge of the subjects to be taught and a demonstration of the rudiments of teaching, the colleges and universities seized the opportunity for developing the professional aspects of teacher training which resulted in the establishment of chairs of pedagogy and departments of education.² Beginning with the establishment of a chair of mental and moral philosophy and didactics at the University of Iowa in 1873 as the first permanent department dealing with education, followed by the establishment in 1879 at the University of Michigan of the first permanent chair devoted exclusively to education,³ the movement has grown until every state university in the United States has a department, school or college of education as an integral part of the institution. With few exceptions, according to Mead, these new departments had no laboratory schools of their own when established.⁴ Even now, one of the major problems of many of these institutions is that of providing laboratory school facilities.

In the state universities, it is obvious, therefore, that the problems arising out of the administration of the laboratory school, a new unit in a new department surrounded by academic traditions and prejudices, are quite different from those involved in the administration of the laboratory school in teachers colleges where its place and importance has scarcely been questioned.

¹ H. H. Ryan, "A Century of Laboratory Schools," *Junior-Senior High School Clearing Houses*, IV (November, 1929), 168; A. R. Mead, *Supervised Student-Teaching*, p. 756. (Richmond: Johnson Publishing Company, 1930.)

² "The Development of the American Teachers College," *Yearbook, American Association of Teachers Colleges*, 1922, p. 10.

³ B. A. Hinsdale, "The Study of Education in American Colleges and Universities," *Educational Review*, XIX (February, 1900), 116.

⁴ *Op. cit.*, p. 756.

Laboratory school administration in those teachers colleges, universities and liberal arts colleges which are not supported and controlled by the state has much in common with the administration of laboratory schools in state universities. To say nothing of other differences, however, the relationship of state universities to the state and the public, due to control and support, gives rise to certain problems of administration which do not exist in those institutions independent of state control and support. We find that the teacher training problems of state agricultural colleges also differ from those of state universities because of the emphasis placed upon vocational training and the nature of laboratory school facilities needed for this type of training.

Although the common elements involved in the administration of laboratory schools in the various types of institutions of higher learning may be greater than the essential differences, the problems peculiar to state universities seem to be sufficient to justify a study involving only laboratory schools connected with the latter institutions. This does not mean that the practices of other types of institutions have been ignored. On the contrary, accounts of studies and professional literature which have to do with the teachers college or teacher training in any type of institution have been drawn upon liberally in so far as use of such data throws light upon the topic under consideration.

STATEMENT OF PROBLEM

No study has been made of the status of laboratory schools connected with education departments of state universities, nor has any attempt been made to formulate and evaluate guides to be used in the administration of such schools. It is proposed that this study shall be concerned with this double task. The purpose of the study may be more specifically stated as follows:

1. To determine the status of laboratory schools connected with departments, schools and colleges of education in state universities with respect to administrative practices, and to note such uniformities and variances in practices and proposed theories as suggest the existence of or the need for administrative guides.
2. To formulate, in light of these suggestions, tentative administrative guides and to bring about the evaluation of the suggested guides through the cooperation of a carefully selected jury of competent educators.

SCOPE OF THE STUDY

This study has been confined to laboratory schools on the secondary level connected with departments, schools and colleges of

education in state universities. Because of no distinct demarkation between state universities and certain other state supported and state controlled institutions, and to avoid omitting any institution that might be classed as a state university, all institutions were included which came under the following classifications:

1. All state supported and state controlled institutions having the official title of state university.

2. All other state supported and state controlled institutions of higher learning, of at least senior college rank, with a liberal arts college, or department, and education college, or department, with the exception of teachers colleges, agricultural colleges, and women's colleges.

Exactly 50 institutions came under these classifications. Data were secured for all of these with the exception of one state institution which was known as a polytechnic institute. The existence of a state university in the same state, concerning which data were obtained, made the omission of this institution of little consequence. A list of the other 49 institutions is given in Appendix A, page 131. The institutions were selected on the basis of information given in the *Educational Directory*⁶ of the United State Office of Education, a directory prepared by the American Council on Education,⁶ and the official bulletins of the institutions concerned.

SOURCES OF DATA

The principal sources of data for this study were (a) catalogues and other official publications, (b) professional literature, (c) reports to regional accrediting agencies, (d) questionnaires, and (e) visits to 10 of the institutions concerned.

Catalogues or bulletins were furnished on request by most of the institutions. These were supplemented where necessary by bulletins from the various institutions on file in the University of Michigan library. Professional literature which seemed to have a bearing on the topic was examined. This was made possible by access to the University of Michigan library and the United States Office of Education library. Copies of reports to the North Central Association, or similar accrediting agencies, were obtained for each of the university high schools and for a representative public high school from each of 18 university high school communities.⁷ Questionnaires were mailed to the principals of each of the 20 university high schools and

⁶ *Educational Directory*. 1930. Bulletin No. 1 (1930), pp. 58-65. Washington: United States Office of Education.

⁶ D. A. Robertson, *American Universities and Colleges* (New York: Charles Scribner's Sons, 1928).

⁷ For the names and location of these schools, see Appendix A, page 132.

to deans or heads of the education departments in those institutions which do not have university controlled laboratory schools.⁸ All of the principals responded and all but one of the other group. A brief questionnaire was also mailed to 37 public school superintendents who had had recent experience with student teaching in their respective school systems.⁹ Thirty-two of these were checked and returned.

Ten institutions were visited for the purpose of observation and conferences.¹⁰ These schools were selected on the basis of the following criteria: (1) type of laboratory school connected with the institution, (2) administrative procedure known to be peculiar to the school, (3) and the section of the country represented. Of course, expense and time in traveling had to be considered.

PROCEDURE

An attempt has been made to present a picture of laboratory school procedure in so far as the data from the sources mentioned permit. Instead of attempting to draw conclusions and make recommendations with respect to the administration of laboratory schools, an effort has been made to formulate, as a result of an analysis of the data, tentative administrative guides related to the various aspects of laboratory school procedure. These tentative guides were submitted to a competent jury for evaluation. It is the purpose of the last chapter to present a unified interpretation of the evaluated guides.

DEFINITION OF TERMS

In order to avoid confusion, the following terms are used in the sense described:

1. *Education department* is used in referring to department, school, or college of education connected with the university.

2. *Laboratory school* may have reference to any school used by the education department for observation, participation, directed teaching, etc.

3. *University high school* has reference to the laboratory school on the secondary level controlled by the university.

⁸ A copy of the questionnaire sent to each of these groups may be found in Appendix B, pages 133-38.

⁹ A copy of the questionnaire sent to each of these may be found in Appendix B, page 139.

¹⁰ One day was spent at each of the following institutions: Indiana University, University of Iowa, University of Kentucky, University of Maryland, Miami University, Ohio State University, University of Virginia, West Virginia University, and University of Wisconsin. My residence at the University of Michigan was counted as the tenth university with which personal contact was made.

4. *Directed teaching* or *student teaching* is usually used instead of the term, *practice teaching*.

5. *Administrative guide* is used in the sense that we usually find *administrative principle* used in professional literature.

6. *Supervising teacher* is used in most instances instead of the term, *critic teacher*.

7. *Supervisor of directed teaching* is used when referring to the official who is immediately responsible for the supervision of directed teaching. He is usually coordinate in authority with the principal of the university high school where such a school exists.

8. *The director of teacher training* is understood to mean an official who has control of laboratory schools, educational activities, student teaching, and other activities related to teacher training.

VALUE OF THE STUDY

This study was prompted by a desire on the part of the education department staff of the University of Virginia, with which the writer has been associated, to have the fullest possible understanding of laboratory school procedure and related problems as a basis for a more intelligent consideration of a proposed expansion program of laboratory school facilities at that institution. It is believed that a great deal of light has been thrown on the two questions which seemed to be of utmost concern: (1) What is being done in this particular field in other state universities? (2) What principles of administration have sufficiently crystallized in relation to laboratory school procedure to justify their use as guides in the operation of such schools in connection with education departments of state universities?

Contact with many officials of education departments of state universities has revealed that many of these individuals are eagerly seeking answers to the same questions. It appears, therefore, that the value of the study depends, not on the need for such an undertaking, but the extent to which the above questions have been answered.

CHAPTER II

TYPES OF LABORATORY SCHOOLS

LABORATORY school facilities vary widely in many respects. As pointed out in the preceding chapter, there are great dissimilarities in these institutions with respect to their objectives and functions. As will be pointed out in later sections, there are likewise great variations in organization, administration, etc. Even when limited to the function of student teaching, including observation, participation, and directed teaching, we find variations ranging from a situation where the prospective teacher simply spends enough time observing in a public school (without supervision) to meet certificate requirements to the situation where the student is carefully supervised by experts in observation, participation and directed teaching with a conscious effort to interpret educational and psychological principles in terms of practice.

Schools used for laboratory purposes may be classified more definitely with respect to the type of control under which they operate, that is, whether under the control of the university concerned, or whether student teaching and other laboratory privileges are available to the university through cooperative arrangements with public schools. Since variations will be pointed out in discussing administrative procedures, costs, pupil personnel, professional personnel, etc., further discussion here will be limited to the classification of schools as university controlled laboratory schools and laboratory schools not under university control. These types of schools will be referred to as university high schools and publicly controlled, or cooperating laboratory schools. Even here the division is not always distinct. Among the 49 institutions under consideration, some difficulty is experienced in classifying University High School of Oakland, California (connected with the University of California at Berkeley), University Secondary Training School of Oxford, Mississippi, and the Mathew Whaley School of Williamsburg, Virginia. Explanation is given, therefore, for classifying the University High School of Oakland as a publicly controlled school and the other two as university controlled.

In case of the University Secondary Training School of Oxford, Mississippi, the university furnishes the school plant fully equipped and maintained. The university selects the teaching staff but the selection must be agreeable to the public school board. While the director of teacher training is selected by the university, he acts as super-

intendent of the city schools for which he receives one-sixth of his salary from the city school board. With this exception, salaries of the personnel of the school are paid by the university. The city pays the university \$50.00 per year for each city pupil enrolled in the University Secondary School. These facts seem to warrant the classification of this school as a university controlled school.

The following quotation describes briefly the relationship between the College of William and Mary and the Mathew Whaley School:

The ownership of the school plant is vested equally in the school board of the City of Williamsburg and the College of William and Mary. The school will be supported and operated jointly by these two cooperating agencies. The school is to serve the double purpose of furnishing elementary and secondary education for the boys and girls of this community and laboratory facilities for the School of Education of the College.

The School will provide practice facilities for prospective elementary and secondary school teachers who are receiving their training at the College of William and Mary. The heads of the departments in the high school, and other teachers, and also certain designated teachers in the elementary school will act as supervising teachers of teacher training, and will give the methods courses in their respective subjects in the School of Education at the College. The professors of education at the College who act as directors of supervised teaching will act as supervisors of instruction in the grades and departments in which practice teaching is done in the school.¹

While this school might be arbitrarily classed as a college controlled or publicly controlled school, the joint ownership of the plant and the dominant influence of the college through the administrative organization seems to justify classification as college controlled. This conclusion is strengthened by the fact that the city is very small and has no other school plant.

The University High School (University of California at Berkeley) is one of the Oakland high schools, supported, maintained and supervised just as are all the others, and differing from them only in so far as the teacher-training program has caused necessary modifications.²

While in practice the school serves in much the same way as a university owned and controlled school and might be so classified, the complete ownership of the plant by the city and the administrative control, at least theoretically, by the city, seems to place it more properly in the publicly controlled group.

Table I, according to this classification, gives the type of laboratory school facilities used by each of the 49 institutions included in this study. While this study deals primarily with schools on the sec-

¹ Helen Foss Weeks, "The New Mathew Whaley School at Williamsburg," *The Virginia Journal of Education*, XXIV (October, 1930), p. 81.

² "The University High School: A Handbook," *University High School Journal*, IX (August, 1929), 123-99.

ondary level, data are given also concerning laboratory school facilities below the secondary school level in order to avoid confusion with respect to these two types of schools. It sometimes happens that the report of a campus school at a university is interpreted to mean a campus school for either high school or elementary school work. This is not always the case.

Twenty of the 49 institutions under consideration have university controlled schools on the secondary level; 13 have college controlled schools below the secondary level; 34 use city schools on the secondary level; 26 use city schools below the secondary level; seven use county high schools on the secondary level; three use county schools below the secondary level; and one uses a secondary and elementary private school. Of the 20 institutions with university controlled secondary schools, seven use city high schools also for teacher training purposes and one a county school. Twenty-nine of the universities depend altogether on cooperative arrangements for laboratory school facilities. It is this group of 29 institutions with which Chapter III will be concerned. Chapter IV will deal with the practices of the 20 institutions with university controlled laboratory schools.

DISTRIBUTION OF TYPES

It is interesting to note that 15 of the 20 university high schools are in the North Central Association territory. Of the remaining five, four are in the Southern Association territory, and one is in the Northwest Association territory.

TRENDS AS TO TYPES

It is probably significant that a number of institutions have recently provided campus laboratory school facilities or expect to provide such facilities in the near future. The College of William and Mary, the University of Kentucky and the University of Mississippi have very recently erected buildings on their respective campuses to be used for laboratory school purposes. Ohio State University, the University of South Carolina, and West Virginia University are at present erecting buildings on their campuses for the same purpose. Five other institutions have volunteered the information that they are planning to erect university high school buildings within the near future.

The trend, therefore, seems to be in the direction of greater use of the university controlled high school. This in itself does not necessarily mean that state university authorities believe that the univer-

TABLE I

TYPES OF LABORATORY FACILITIES PROVIDED BY EDUCATION DEPARTMENTS
IN STATE UNIVERSITIES FOR TEACHER TRAINING PURPOSES

Institution	Type of School on Secondary Level				Type of School Below Secondary Level			
	University Controlled	City	County	Private	University Controlled	City	County	Private
U. of Ala.		X	X					
U. of Ariz.		X				X		
U. of Ark.	X				X			
U. of Cal. (Berkeley) ..		X				X		
U. of Calif. at L. A. ...		X				X		
U. of Col.		X			X	X		
U. of Del.		X				X		
U. of Fla.		X				X		
U. of Ga.		X				X		
U. of Idaho		X				X		
U. of Ill.	X		X			X		
Ind. U.		X				X		
State U. of Iowa	X				X			
U. of Kans.	X							
U. of Ky.	X				X			
La. State U.	X							
U. of Me.			X					
U. of Md.		X						
Miami U.	X	X			X	X	X	
U. of Mich.	X	X*			X			
U. of Minn.	X	X				X		
U. of Miss.	X†							
U. of Mo.	X	X			X			
State U. of Mont.			X	X		X		X
U. of Neb.	X					X		
U. of Nev.		X				X		
U. of N. H.		X	X		X	X	X	
U. of N. Mex.		X				X		
U. of N. C.		X				X		
U. of N. D.	X	X						
O. State U.		X‡				X		
Ohio U.		X	X		X	X		
U. of Okla.	X				X§		X¶	

The above table shows the type of laboratory facilities provided by the education department of each state university for teacher training purposes. The symbol, X, is placed opposite the institution in the column headed by the type of school used; for example, the University of Alabama uses both city and county schools on the secondary level in connection with the teacher training program but has no facilities for directed teaching below the secondary level.

* The University of Michigan uses a number of public high schools in connection with what is known as the "Correlated Course in Education." This is discussed in Chapter III.

† The University of Mississippi and the College of William and Mary are dependent upon cooperative arrangements with respective city public school systems for students, but the arrangements are such as to give the college control over the schools used for training schools.

‡ Buildings are being erected on the campuses of Ohio State University and the University of South Carolina for campus secondary schools.

§ Pre-school only.

¶ Summer school only.

TABLE I (Continued)

Institutions	Type of School on Secondary Level				Type of School Below Secondary Level			
	University Controlled	City	County	Private	University Controlled	City	County	Private
U. of Oregon	X	X						
Pa. State College		X				X		
Purdue U.		X						
U. of S. C.		X†						
S. Dakota U.	X					X		
U. of Tenn.		X				X		
U. of Texas		X				X		
U. of Utah		X			X	X		
U. of Va.		X	X				X	
U. of Vt.		X				X		
Wash. State College..		X						
U. of Wash.		X				X		
W. Va. U.	X	X						
Col. of Wm. and Mary	X†				X			
U. of Wis.	X							
U. of Wyo.	X				X			

sity high school is the most satisfactory solution to this vexing problem of providing facilities for observation, participation and directed teaching for prospective teachers. However, in 1925, Henderson found that a majority of the 114 universities and colleges in all parts of the United States making reply to his questionnaire favored training schools owned and controlled by teacher training institutions, supplemented by the use of city school systems.³ It occurs to the writer that we might attach some weight to the reactions of those who have tried the university controlled school. Some of the institutions using the university high school are also using public high schools and others have only recently used public high schools in connection with their training programs. With these facts in mind, the following question was asked the principal of each of the 20 university high schools: "Considering all things in light of your experience and observation, would you prefer for the use of your institution (a) a college owned and controlled high school, (b) a public high school, or (c) an arrangement for the use of both college owned and public high school?" A summary of the replies is given in Table II.

³ Joseph L. Henderson, "A Statistical Study of the Use of City School Systems by Student Teachers in Colleges and Universities in the United States," *Supervisors of Student Teaching*, Sixth Annual Session (1926), pp. 50-63.

These facts seem to indicate that the apparent trend toward the use of the campus high school is based upon the belief that the college controlled school is very desirable in providing adequate facilities for student teaching.

TABLE II

PREFERENCE OF PRINCIPALS AS TO TYPE OF LABORATORY SCHOOL	
Nature of Replies	Frequency
In favor of college owned and controlled school.....	15
In favor of a public high school	1
In favor of an arrangement for use of both	4

SUMMARY

Although secondary schools used for laboratory school purposes in connection with education departments of state universities vary widely in many respects, they may be readily classified, with three exceptions, as university controlled high schools, and publicly controlled or cooperating laboratory schools. Of the 49 institutions to be considered, 20 fall into the former classification and 29 into the latter.

In so far as indicated by recent, present, and projected building programs, the trend with respect to types of laboratory schools is toward greater use of the university controlled school. This conclusion is substantiated by expressions of preference for university controlled schools by the principals of these institutions, many of whom are familiar with both types.

SUGGESTIONS FOR ADMINISTRATIVE GUIDES

The material of this chapter suggests the desirability of an expression from teacher training authorities as to what should constitute a desirable laboratory school, or system of laboratory schools, under ideal conditions.

CHAPTER III

ADMINISTRATION OF DIRECTED TEACHING IN COOPERATION WITH PUBLIC SCHOOLS

ALTHOUGH the present tendency seems to be in favor of maintaining a campus school fully controlled by the university as a means of providing laboratory facilities for the teacher training activities, the fact remains that approximately 60 per cent of our state universities do not have campus schools on the secondary level. It seems important, therefore, that we should have a picture of what is taking place where public schools are used for directed teaching purposes under some sort of cooperative arrangements. Space will not permit a detailed analysis of this type of laboratory school, but an attempt will be made to present briefly some important facts with respect to the following: (*a*) types of cooperative arrangements, (*b*) contractual relations between state universities and cooperating public schools, (*c*) cost of maintaining cooperative relations, (*d*) personnel management in relation to the cooperative program, (*e*) functions of cooperating schools as laboratory schools, (*f*) and administrative difficulties involved in the operation of a cooperative program.

TYPES OF COOPERATIVE ARRANGEMENTS

Types of cooperative arrangements between public school and university authorities vary widely. At one extreme, we find a situation where the student teacher is permitted to go into the public high school and observe in those classes indicated by the principal; the student does no teaching and has no opportunity to participate in any school activity; even the observation is undirected. At the other extreme, we find a great high school which, though theoretically under the control and supervision of city school authorities, in practice serves every purpose of a well organized university owned and controlled school. During the school year, 1930-1931, we find in this school 612 student teachers carefully supervised under almost ideal conditions by 114 critic or supervising teachers, 21 supervisors and assistant supervisors, and a director of teacher training. Between these two extremes, we find various types of arrangements. These variations with respect to contracts, costs, selection and supervision of personnel, experimental privileges, etc., will be apparent in later sections of this chapter. There are, however, cooperative arrangements between certain universities and public schools worthy of special attention, not because they are representative of the prac-

tices in groups of institutions but because of certain peculiarities with respect to the arrangement, or the program which is dependent upon the arrangement.

The arrangement between the University of Indiana and the Bloomington Public Schools has functioned for many years without serious friction. The arrangement is simple. The teachers who are to supervise student teaching are selected jointly by the university and public school authorities with the university assuming the initiative. After both groups are satisfied, the selection is approved by the school board and the governing board of the university. Forty per cent of the salary of each supervising teacher is paid by the university and 60 per cent, which represents an amount equivalent to the salary of the average high school teacher, approximately, is paid by the city school board. These teachers carry full teaching loads and are subject to the same high school duties, and are under the same supervision as other teachers except in so far as their duties are related to student teaching activities. The supervising teacher may be assigned two student teachers for each of five periods. In addition to conferences incidental to daily supervision, weekly group conferences of an hour or more with student teachers are required. The work of the supervising teachers is under the general supervision of the dean, who is director of teacher training, and an assistant director. Teachers connected with this program are given the rank of instructor and critic teacher.

The plan at the University of Virginia differs from the Indiana plan in the following respects: (1) Supervising teachers are chosen by the university with the approval of the superintendent of the public schools. (2) The supervising teacher teaches only two periods each day, but must conduct a special methods class in his particular field, and is responsible for certain research and supervisory activities aside from supervision of student teaching. (3) The city school board pays the pro rata amount for the two high school classes taught by each supervising teacher that would be paid any high school teacher for doing the same work according to the fixed salary schedule in effect from time to time. The university pays about 60 per cent of the salaries. (4) Supervised teaching is under the general supervision of the director of supervision of secondary education.¹

At Ohio State University, student teaching is under the general supervision of members of the Department of Principles and

¹ *The University of Virginia Record*, New Series, Vol. XVI, No. 8 (March 15, 1930), pp. 25-27.

Practice of Education.² These, who are specialists in their respective subject matter fields, select from among the city teachers those who seem to be capable of supervising student teachers. This list is submitted to the superintendent of the Columbus City Schools who may approve, or add to, or subtract from the list. When the schedule of high school classes is made up, the principals of the various high schools in which student teaching is done send copies of the schedule to the university officials concerned. These copies have those classes marked and periods checked in which practice students are preferred. Students are assigned to these classes by the university supervisors. Not more than one student may be assigned to a teacher during any academic quarter. In addition to the supervision by the city teacher, the supervisor from the university attempts to visit each student weekly. The city teacher receives no compensation for supervising student teachers, but any teacher in the Columbus Public Schools may attend the Ohio State University without tuition fees. The city teacher acting as training teacher has no obligation to the university beyond the period in which the supervision of the student is done.

Pennsylvania State College has cooperative arrangements for student teaching with the Johnstown Public Schools and the Altoona Public Schools. Johnstown is about 90 miles, Altoona about 45 miles, distance from the college necessitating continuous residence at Johnstown, or Altoona, on the part of the students during the period of supervised teaching. The seniors majoring in Education are divided into two groups. One group does its directed teaching during the first nine weeks of the first semester, while the other group remains at college and pursues intensive courses in education. During the second half of the first semester, the programs for these two groups are reversed.

One of the supervisors, a member of the regular faculty of the college, accompanies each group to its assigned city.³ With the assistance of the superintendent and the high school principals, supervising teachers are selected from the regular high school faculty and assignments made. Not more than one student is assigned to a teacher. The teacher is given a bonus for acting as supervising teacher.

² Ohio State University is in the process of developing a very elaborate campus school program. The present program will probably be altered when the campus school begins to function.

³ Each supervisor accompanies and supervises those students whom he has instructed in Principles of Teaching during the latter half of the junior year. Officials of this institution believe that such an arrangement results in an economy of time and effort, and achieves a more satisfactory student teaching outcome.

The first week of the student's stay is largely an adjustment period under the guidance of the training teacher. During the following eight weeks, he teaches two classes a day and observes one in the room of his training teacher. He also has a conference each day with his training teacher. He will observe at least two other teachers each day. During the last week, the student may take over the full load of the training teacher. In addition to the observation and teaching program, the student is expected to participate in various school activities, and attend department conferences and teachers' meetings. He also attends a class twice each week conducted by the supervisor.

The system of laboratory schools at the University of California at Berkeley consists of the Rockbridge Elementary, the Claremont Junior High School, and University High School. These are city schools different from other city schools only in so far as the teacher training has caused necessary modifications. With reference to the University High School, we are told in the *University High School Journal* that:

The Oakland Board of Education appoints all the teachers in the school. These teachers for the most part are engaged in supervising student teachers in some, at least, of their classes. The connecting link between the University and Oakland Public Schools is the principal of the school, Dr. George A. Rice, who is also Director of Practice Teaching at the University of California by mutual agreement between the officials of the two institutions.

The University appoints the supervisors...; they have the status of department heads in the Oakland Schools, and assume the immediate responsibility for the supervision of student teachers in their respective departments.⁴

The University pays the salaries of the supervisors and assistant supervisors, and half of the salary of the principal. The University agrees also to pay to the City School Board whatever these schools cost more than the average of other city schools.

The University High School on the campus of West Virginia University has been classed in the previous chapter as a university controlled laboratory school. However, the existence of the school and the operation of what promises to be a very effective teacher training program are dependent upon a cooperative arrangement with three rural school districts adjacent to the university community. A unique feature of the arrangement is that the agreement between the university and the cooperating districts has been written into the state law.⁵ Such an arrangement insures that the enrollment will be typical of schools in which most of the beginning teachers will teach.

⁴ "The University High School: A Handbook," *University High School Journal*, IX (August, 1929), 182.

⁵ *Acts of the West Virginia Legislature for 1927*, Chapter 71.

The University of Kentucky owns and operates its own laboratory school involving the kindergarten and all grades from first through twelfth. It is interesting to note that the school board of Lexington pays \$1,125 per month of the salaries of the teacher in the kindergarten and one teacher each for the next eight grades. In return for this, the public schools have the privilege of sending free of tuition charge 25 children to the kindergarten and each of the next eight grades. These children come from crowded districts selected by the school board. The board does not point out what children are to enter the training school, but merely selects the districts from which they may come. Their applications are placed on file at the training school, where they are enrolled in the order of the date of their application as vacancies occur. A further arrangement provides that if the quota of 25 city pupils to the teacher is not filled, the University may admit tuition pupils for the remainder of the quota and pay the school board the tuition received from this source. The enrollment is limited to 30 pupils in the kindergarten and each of the first six grades, and to 35 in the junior and senior high school.

In addition to the education of a portion of the pupils of the city, the city school profits by this arrangement through the privilege extended to the city teachers to observe in the campus school and confer with the teachers and supervisors of the school. The superintendent explained that he not only expected to improve his teachers in service through a regular observation program, but expected also to be able to get new teachers with very superior training as a result of the cooperative system.

Although only two years of the junior high school and the grades below the junior high school are benefited by the cooperative arrangement, attention is called to it because such a program might apply to the upper grades just as well as the lower grades in certain situations.

At the University of Michigan, a rather unique experiment is being conducted in an attempt to correlate and integrate into a single course the important elements in the professional training of prospective teachers. Although the University of Michigan has a splendidly organized and functioning system of laboratory schools owned and controlled by the University, this experiment requires cooperative arrangements with certain selected schools.⁶

⁶ The facts presented in connection with the discussion of the Correlated Course at the University of Michigan are taken from a mimeographed bulletin entitled "A Correlated Course."

The course requires the full time of a student during one semester. All the work in education is planned around classroom situations. Before the Semester begins in which the work is to be undertaken, the student is expected to spend from one to two weeks in the school in which he later is to do his directed teaching. During this time he visits classes of the teachers who are dealing with the subjects he is likely to teach, learns to know the pupils, familiarizes himself with the texts used, notes the topics and lists the projects and activities with which the classes will likely be working at the time of his directed teaching period, obtains courses of study, enters into student activities, attends teachers' meetings, and so far as possible familiarizes himself with the spirit and tone of the school.

The student spends the first seven weeks on the University campus. During this time he is presented with the following aspects of education by the professors of the respective fields: Education of Exceptional Children, Philosophy of Education, General Methods, History of Education, Student Activities, Educational Psychology, Professional Literature, Psychology of Adolescence, Administration, Vocational Guidance, Directed Teaching, Health, Character Education, Educational Measurements, Library Usage, Speech and the Pre-School. In each field an attempt is made to correlate the instruction with specific teaching situations.

During the five or six weeks following this period of instruction on the campus, the student returns to his field work and does his directed teaching in a cooperating school in which sympathetic and intelligent supervision has been assured. The supervision is provided by a gifted critic teacher and a supervisor, perhaps a principal or superintendent especially interested in professional training. Here the student is apprenticed to a high grade teacher to serve as an assistant teacher. The student teaches regularly for an hour or two a day and observes classes for at least two periods. In addition to these regular duties, he enjoys a variety of experiences in the way of faculty meetings, community contacts, student activities, etc., which cannot be provided to the same extent in the campus school.

During the last four weeks of the semester, the student is back on the campus. The primary purpose of the work during this period is to extend and summarize theory in each field and in particular to relate this to the student's practical experience in directed teaching.

Other interesting situations in which laboratory school facilities are provided, or made possible, through cooperative arrangements might be described; for example, as has been pointed out in a pre-

vious section, the laboratory schools connected with the University of Mississippi and the College of William and Mary are made possible through cooperative arrangements. However, the remainder of this chapter will be devoted to the general characteristics of and the problems incident to the administration of the student teaching program provided for through the cooperation of state university and public school authorities. The facts and figures given hereafter in this chapter have reference to the 29 institutions classed in the preceding chapter as having training facilities through cooperative arrangements rather than university controlled schools unless otherwise specifically indicated.

CONTRACTUAL RELATIONS BETWEEN STATE UNIVERSITIES AND COOPERATING PUBLIC SCHOOLS

There seems to be no uniformity of practice with respect to the contractual relations of state university and public school authorities where cooperative relations are maintained. We may find a situation where the cooperative arrangements have been functioning without friction for many years without having had a formal contract at any time as in the case of the University of Texas and the Austin Public Schools, or instances where the authority for a highly satisfactory program is based on a short simple resolution of the school board as in the case of the University of California at Los Angeles and the public schools of Los Angeles.⁷ On the other hand, we may find the agreement upon which the cooperating program functions carefully defined and written into state law as in the case

⁷ A resolution of the Los Angeles School Board in 1925 gave permission to the University to use one of the elementary schools as a laboratory school as a result of a request for such a privilege by the University of California authorities. The resolution read as follows:

“(a) That the above mentioned cooperative effort be undertaken; that the present principal of the school and as many of the teaching staff as possible and as desired be retained; that others be secured who will be willing to undertake the responsibilities of demonstration work; that the immediate supervision of the demonstration rooms be under a person or persons who shall be selected by the University of California and approved by the Board; but that the present principal of the school administer the demonstration rooms as well as the entire school; and

“(b) That the salaries to be paid the teachers be according to the Board's own salary schedule, plus \$500 each to be paid by the University of California; that the salary of the supervisor be paid by the University of California.”

The details of the administration of the school have been worked out between the superintendent of the public schools and the university authorities, but no written contract has existed more than the resolution quoted above, except a simple statement from the school board in 1930 permitting the university to use another school after the location of the university was changed.

of West Virginia State University and three school districts of Monongalia County,⁸ or we may point to a very happy situation where the terms of a formal contract, carefully written, are based upon underlying state legislation written specifically for such a program as in the case of the University of Mississippi and the Oxford Public Schools.⁹ The writer is familiar with a situation which has maintained a cooperative program for years without friction. When enquiry was made concerning the contract, it developed that the contract had not been referred to or renewed in so many years that a copy could not be found. On the other hand, another situation is well known to the writer where a great deal of care in the terms of the contract even to the extent of defining the functions of offices and duties of personnel did not prevent serious friction. While no attempt will be made to draw conclusions, the question might well be asked as to the extent and definiteness of the contract and the legal basis for such contracts which would be desirable in providing for directed teaching by means of a cooperative program.

According to replies from the 29 institutions which provide training facilities on a cooperative basis, nine have no contract with the cooperating public schools; four have contracts for a period of one year; one has a contract for a period of three years; and 14 have continuous contracts. One of the replies was not definite enough to be used. According to these data, the continuous contract seems to be more popular than one for a definite period.

COST OF MAINTAINING COOPERATIVE RELATIONS

It is apparent from personal interview, correspondence and other sources of information that cost is the greatest single factor in developing a satisfactory situation for directed teaching. There is evidence that many institutions which maintain cooperative relations with public schools do so because of insufficient funds to operate campus schools.

In order to get some idea as to the cost of providing teacher training facilities through cooperative arrangements, the following question was submitted to the deans of education departments of the 29 institutions which maintain no campus secondary schools: "What is the total expense of all activities connected with directed teaching in the public schools (including the college's share of the salaries

⁸ See Appendix E, page 150.

⁹ The general provisions of the contract are stated on page 6 of the preceding chapter. The law which was passed in order that such a contract might be possible is quoted in Appendix E, page 152.

of the supervisor of directed teaching, critic teachers, principal and superintendent, additional supplies, transportation and other activities that would not be necessary if you did not have student teaching?" Twenty of these answered in terms of definite figures. The results are given in Column 2 of Table III. The names of the institutions are omitted for obvious reasons. Column 3 indicates the number of students enrolled for directed teaching during the year. By the

TABLE III
COST OF MAINTAINING COOPERATIVE RELATIONS

Institution	Total Expense of All Activities Necessary to Di- rected Teaching	Number of Stu- dents Enrolled for Directed Teaching on Secondary Level	Per Capita Cost
1	\$10,000.00	98	\$102.00
2	250.00	75	3.00
3	62,000.00	612	101.00
4	95,000.00	612	155.00
5	3,500.00	60	58.00
6	2,675.00	38	70.00
7	900.00	50	18.00
8	3,000.00	160	19.00
9	2,700.00	25	108.00
10	5,400.00	54	100.00
11	3,000.00	70	43.00
12	6,500.00	40	163.00
13	1,700.00	60	28.00
14	275.00	24	11.00
15	18,750.00	33	568.00
16	55,000.00	100	55.00
17	0.00	20	0.00
18	19,000.00	28	679.00
19	1,825.00	50	37.00
20	18,000.00	210	86.00

This table may be read as follows: In institution No. 1, the total expense necessary for directed teaching (including the college's share of the salaries of the supervisor of directed teaching, critic teachers, principal and superintendent, additional supplies, transportation and other activities that would not be necessary if there was no student teaching program) is \$10,000.00, the number of students enrolled during the year in directed teaching is 98, making the per student cost \$102.00.

simple process of dividing the cost by the number of students enrolled for directed teaching, we arrive at the per student-teacher cost. The fourth column gives these figures to the nearest dollar. It will be noted that the annual cost of providing directed teaching in these 20 schools varies from nothing to \$679.00 per student-teacher. Estimates made from available figures for five other institutions do not change the picture we get from the actual figures for the 20 institutions as given in Table III.

According to the figures of Table III, the mean annual cost per student-teacher for directed teaching in these universities is \$128.00.

However, the annual per student-teacher cost for the median institution of this group is \$64.00.

PERSONNEL MANAGEMENT IN RELATION TO THE
COOPERATIVE PROGRAM

The introduction of directed teaching as one of the functions of a cooperating public school, or public school system, immediately gives rise to personnel problems because of additional duties, the nature of the new activities and the delicate relationship between the two institutions involved. The most important of these problems will be discussed briefly under the following headings: (a) remuneration of cooperating personnel, (b) college rank allowed cooperating personnel, (c) supervision of teachers, (d) selection of teachers, (e) teaching load, (f) conferences with student teachers, and (g) training of teachers.

Remuneration of Cooperating Personnel.—Among those institutions which maintain cooperative relations with public schools, the question of how to pay for the privilege of student teaching seems to be important. Some of the legitimate questions that may arise are as follows: Can the administrative and teaching personnel of the public schools be induced to take over the extra duties of supervising student teaching without additional monetary reward? If it seems wise to pay public school personnel for this service, should the pay go to the superintendent, the principal, the teacher, or to all? Should the reward be in the nature of a fee, a portion of the salary, or should a lump sum be paid to the school board for distribution as they see best?

Table IV seems to indicate that the institutions maintaining cooperative relations with public schools are answering the above questions in various ways. Twenty-seven of the 29 institutions under consideration made definite replies concerning the remuneration of teachers. Of the 27 reporting, nine do not pay the teachers; six pay them fees or bonuses, usually from \$10.00 to \$40.00 per student-teacher supervised; 10 pay a portion of the salary, and this portion ranges from 5 per cent to 100 per cent with a median of approximately 40 per cent; and of the two institutions using other means of remuneration, one pays a stated sum to the school board to be distributed to the teachers in accordance with the school board's policy, and the other pays to the school board the cost of operating those schools used for training purposes above the cost of the average school of the city.

According to definite replies from 28 of the 29 institutions, 21 do not make financial rewards to the principals of the cooperating high schools. Of the remaining institutions, the principal has a portion of his salary paid in seven instances by the university and, in another case, he is paid on a fee basis.¹ The same institutions replying with respect to the superintendents of the cooperating school systems indicate that 24 superintendents receive no pay from the university, that one is paid a small honorarium, and that the university pays a portion of the salary of the superintendent in four instances.

TABLE IV
MEANS USED BY STATE UNIVERSITIES FOR REMUNERATING COOPERATING
PUBLIC SCHOOLS, OR PUBLIC SCHOOL PERSONNEL FOR
TEACHER-TRAINING PRIVILEGES

Official	No Pay from University	Fee or Bonus	Portion of Salary	Other Means of Remuneration	No Report	Total
Teacher	9	6	10	2	2	29
Principal	21	1	7	0	1	30*
Superintendent	24	1	4	0	1	30*

The numerals in the table indicate frequency; for example, reading the top line of numerals, we see that nine state universities with cooperative relations do not pay the public school teachers who serve as critic or supervising teachers, six pay the teachers a fee or bonus, 10 universities pay a portion of the salaries of the cooperating teachers, two have other means of remunerating the schools, and two institutions did not report on this point.

* This table involves figures for the 29 institutions only which depend upon cooperative arrangements for directed teaching facilities; however, one institution has cooperative relations with two school systems, subsidizing the salaries of the superintendent and principals of one and not in the other. This accounts for 30 as the total instead of 29.

College Rank Allowed Cooperating Personnel.—Although not as important perhaps as the question of financial reward, the question of whether or not college rank should be allowed administrative and teaching personnel of cooperating public schools often seems to be involved in an attempt to develop an adequate program of teacher training in connection with public schools. According to the data at hand, there seems to be considerable difference of opinion on this point, if present practice may be taken as an index. Table V gives a digest of replies made to an enquiry sent to the 29 institutions with cooperative programs. In 17 instances, no rank is provided the public school teacher who supervises student teaching or observation; she is given the title of supervising or critic teacher by two institutions, ranked as instructor by six, given professorial rating by two, and allowed the title of assistant supervisor by another. One institution did not report on this point.

¹ The reason for the apparent discrepancy in figures is due to the fact that one institution has different arrangements with two school systems.

The principal of the cooperating high school is allowed no rank by 24 of the universities. He is rated as a critic or supervising teacher by one institution, instructor by two, teacher training coordinator by one, and assistant professor or above by another. One institution did not make a definite report on this point.¹

Twenty-eight schools made reports concerning the practice of giving the superintendent college rank. Of this number, rank is allowed in only four instances. One is given the title of supervising or critic teacher, one is ranked as assistant professor, one as assistant supervisor of practice teaching, and another as lecturer.

TABLE V

OFFICIAL RANK PROVIDED BY STATE UNIVERSITIES FOR THE ADMINISTRATIVE AND TEACHING PERSONNEL OF THOSE PUBLIC SCHOOLS COOPERATING IN THE TEACHER TRAINING PROGRAM

Official	No Rank	Supervising or Critic Teacher	Instructor	Assistant Professor or Above	Other Rank	No Report
Teacher	17	2	6	2	1*	1
Principal	24	1	2	1	1†	1
Superintendent	25	1	0	1	2‡	1

The above table may be read as follows: Of the 29 institutions reporting, 17 allow no rank for the public school teacher who supervises student teaching, two allow the rank of supervising or critic teacher, six rank such teachers as instructors, two rank them as assistant professors or above, etc.

* Assistant supervisor. In this case, the supervisor is a full-time university employee.

† Teacher training coordinator.

‡ He is given the title of "Assistant supervisor of practice teaching" in one case and "Lecturer" in the other.

The apparent discrepancy in figures in the case of the principals and superintendents is due to the fact that one institution has cooperative arrangements with two public school systems allowing college rank for the principal and superintendent in one system and not in the other.

According to these data, the practice does not seem to favor any rank above instructor for the public school teacher who supervises student teaching; as a matter of fact, the majority of the institutions do not even allow an official rating as high as instructor. Prevalence of practice seems to be against any college rank for the administrative personnel connected with the cooperative program.

Supervision of Teachers.—According to reports made by 28 institutions, the general supervision of student teaching and of the personnel in immediate charge of student teaching in cooperating public schools is done by officials as indicated in Table VI.

In 25 of the above cases, the public school authorities have no voice in the selection of the individual responsible for the general

¹ Since there are only 29 institutions involved in this part of the study, there seems to be a discrepancy in figures. This is due to the fact that one institution has cooperative arrangements with two public school systems and allows rank in one and not in the other.

supervision of student teaching done in the public schools. In only two cases, however, do these university officials extend their supervisory activities in the public schools beyond that of student teaching.

TABLE VI

OFFICIALS RESPONSIBLE FOR SUPERVISION OF STUDENT-TEACHING	
Officials	Frequency
Supervisor of directed teaching.....	15
Director of secondary training	1
Head supervisors	5*
Dean of education department	1
Professor of secondary education	3
Members of staff of education department	2
Superintendent of public schools	1
Total	28†

* In several institutions, a regular member of the university faculty is responsible for supervision of student teaching in his particular subject matter field.

† One of the 29 institutions under consideration does not attempt to include directed teaching in its teacher training program.

Assignments of student teachers to their respective schools and supervising teachers are accomplished by the officials indicated in Table VII. In seven cases it was indicated that the superintendent or principal was consulted about the assignments.

TABLE VII

OFFICIALS RESPONSIBLE FOR ASSIGNMENT OF STUDENT TEACHERS	
Officials	Frequency
Supervisor of directed teaching.....	19
Director of secondary training.....	1
Head supervisors	3
Dean	2
Faculty of education department	3
TOTAL	28

Selection of Teachers.—Of the 27 institutions submitting definite information on this point, the selection of supervising teachers is initiated by the university authorities in 10 instances and by public school authorities in 17. As a general practice, it seems from the data that selection of the teachers who are to supervise student teaching is usually initiated by those universities which provide official rank for the supervising teacher, or pays a portion of the regular salary of the supervising teacher. Probably this is to be expected. In at least 12 cases, the selection of supervising teachers must be made from those teachers already employed in the local schools. Where the selection is initiated by the university authorities, the approval of the school board must be had. The university, according to the data, is

usually represented by the supervisor of directed teaching, or the dean, in the selection of teachers.

The Teaching Load.—Twenty-three of the 27 institutions submitting definite information with respect to the teaching load of supervising teachers indicated that these teachers handle a full teaching load according to the regular schedule of high school teachers, or at least 25 hours per week. In four of the schools, supervising teachers are on classroom duty from two to four hours a day. Since it is generally assumed by public school administrators that a full-time teaching assignment requires the full time and energy of a teacher during the school day, one might legitimately ask whether student teachers may be properly supervised by teachers who already have full teaching loads.

TABLE VIII
CONFERENCES WITH STUDENT TEACHERS

Frequency of Conferences	Number of Institutions
Daily	7
One each week	5
Two each week	3
Two each month	1
When needed	5
None	4
TOTAL	25

Conferences with Student Teachers.—Closely related to the problem of the teaching load as discussed above is the matter of conferences with student teachers. Aside from its time and energy consuming aspect, the conference is an important factor in the supervision of student teaching. Twenty-five institutions made reports on the frequency of regularly scheduled conferences of student and supervising teachers as shown in Table VIII.

From these data, one must necessarily raise a doubt as to the efficiency of supervision where no conferences are scheduled, or else discount the value of very frequent conferences.

Training of Teachers.—The following statement by one with a varied experience in connection with teacher training not only indicates the need for adjustment in the supervising teacher's load, but implies that the technical and professional nature of the work requires specially trained teachers:

Of all the types of training with which I happen to have had experience, whether in the teacher-training institution as college instructor and supervisor of student teaching, or in the field of practice as county supervisor, city super-

visor, and state supervisor, there is no question in my mind that the supervision of student teaching is the most productive of results, the most technical in its nature, the most highly professional, the most arduous, and the most impossible under present conditions of satisfactory accomplishment.¹²

According to information received from 25 state universities with cooperative programs, very nearly 100 per cent of those who supervise student teaching in these institutions have at least the Bachelor's degree. The reports of 13 institutions showed that from 10 per cent to 25 per cent held Master's degrees; six institutions reported 26 per cent to 50 per cent with Master's degrees; four reported 51 per cent to 100 per cent with Master's degrees; and one institution reported that none of the teachers doing critic work held Master's degrees. Only six institutions reported one or more supervising teacher with the Ph.D. degree, the total for the six institutions being eight.

It appears from the data at hand that the standards of the American Association of Teachers Colleges, for the present at least, would be met by most of the institutions which provide for student teaching through cooperative arrangements in so far as the standards apply to preparation of teachers.¹³ As will be noted in another part of this study, however, the training of the supervising teacher in the cooperating schools seems to be inferior to that of the supervising teacher in the university controlled high school.

¹² Mary D. Pierce, "A Plan for Measuring the Critic Teacher's Load in Terms of College Class Hours," *Supervisors of Student Teaching*, Seventh Annual Session, 1927, p. 25.

¹³ The standard with reference to the training of the teachers in the training school reads as follows:

The minimum scholastic requirement for teachers in the training school shall be graduation from a college of recognized standing, presumably evidenced by possession of a bachelor's degree or equivalent training. Six years after the date on which these standards take effect, the minimum scholastic requirement for all new training school teachers shall be the same as for teachers in the college department.

Teachers who have been members of the faculty of the training school for not less than five years, and whose training is not equivalent to this requirement, may be considered to have equivalent training for six years after the date on which these standards take effect, provided that the president of the college submits a statement of their training and experience and files with the Committee on Accrediting and Classification a declaration that such members of the faculty are rendering service in their own teaching and in the supervision of student teachers which is of a superior quality as judged by the standards of the best public school systems in the state in which the teachers college is located.

During this period of six years, this declaration must be made annually and shall be based upon actual inspection of the teacher's work.

FUNCTIONS OF COOPERATING SCHOOLS AS LABORATORY SCHOOLS

In so far as is shown by professional literature, observation in several institutions by the writer, and reports from the 29 state universities with cooperative arrangements on certain significant points, the cooperating laboratory school generally functions in a very small way as a laboratory school beyond that of providing opportunity for observation and directed teaching. Of five institutions maintaining cooperative relations with public schools with which the writer has made personal contact, only one attempts to use the cooperating public high school beyond that of directed student teaching. In this one situation, however, investigations are being made with respect to curriculum content and methods of teaching. These investigations seem to be having considerable influence throughout the state.

An attempt was made to throw further light on this aspect of laboratory school procedure by submitting several pertinent questions to the 29 institutions with cooperative arrangements. Table IX shows the results obtained in reply to the question, "Do you have the privilege of conducting experiments in connections with the cooperating public school?"

TABLE IX
EXTENT TO WHICH STATE UNIVERSITIES HAVE THE PRIVILEGE
OF CONDUCTING EXPERIMENTS IN CONNECTION WITH
COOPERATING PUBLIC SCHOOLS

Answer	Frequency
Do have the privilege	10
Do not have the privilege	9
To a limited extent	5
Privilege not requested	3
No answer	2

These replies seem to indicate that the majority of the institutions have the privilege of carrying on investigations in connection with the public schools at least to a limited extent.

Table X shows a summary of replies in answer to the question as to whether the cooperating high schools were required to use state adopted curricula and textbooks. In this same connection, the following questions were asked: "If not, does the education department have a voice in the development of the high school curricula? In the selection of texts?" Of those 10 schools which are not bound by state regulations, the university department of education has no voice in the development of the curricula in six instances, indirectly in one case, suggestions are welcomed in another, and no answer was given in one case. Only one institution reported that the university department of education had a voice in the development of the

curricula. In the five cases where the cooperating high schools were bound by state regulations, with respect to the curricula, partially, in general or within limits, four departments of education have no voice in the development of the curricula. In the fifth institution, which happened to be one that maintained cooperative relations with two public school systems, the department of education has no influence in one system and considerable influence in the other.

Table X shows that 14 of the cooperating high schools are not required to use state adopted textbooks. In 12 of the 14 instances, the university department of education has no influence in the selection of texts, in one case the reply indicated definite influence, and in the final case, the department of education has considerable influence in the selection of texts in one public school system and none in another.

TABLE X

RESTRICTIONS ON COOPERATING HIGH SCHOOLS WITH RESPECT TO USE OF STATE ADOPTED CURRICULA AND TEXTBOOKS

Answer	Is the cooperating high school required to use state adopted	
	Curricula?	Textbooks?
Yes	12	11
Partially, in general, or within limits.....	5	2
No	10	14
No answer	2	2

The numerals in this table represent the frequency of the answers; for example, 12 of the cooperating high schools are required to use the state adopted curricula and 11 are required to use state adopted texts.

These figures seem to indicate that cooperating public high schools serve to a very limited extent as laboratories for curriculum development.

Feeling that the amount of money spent by the university department of education for supplementary materials, standardized tests, etc., to be used in connection with the cooperative project would give some indication of the activities of the university department of education in the cooperating schools beyond that of directed student teaching, the following question was asked: "What amount of money is appropriated by the university for supplementary materials, standardized tests, etc., for use in connection with the training school work?" Twenty-four replied that no money was provided for this purpose. One institution provided \$500.00 for such material; one, \$400.00; two "only a small amount"; and one, "no set amount." From these figures, it would appear that such activities as are dependent upon supplementary materials, standardized tests and related materials are quite limited in connection with the cooperative program.

Though more than half of the 29 institutions indicated that they had the privilege of carrying on experimental programs in connection with the cooperating high schools, the restrictions noted above with respect to the curriculum, and the absence of financial provisions for those materials which would be essential to so many other important investigations seem to indicate that the cooperating high school, in practice, becomes a laboratory school only to the extent of providing student teaching facilities.

ADMINISTRATIVE DIFFICULTIES INVOLVED IN A COOPERATIVE PROGRAM

The following statement from *Survey of Land-Grant Colleges and Universities* sets forth some of the difficulties that may be expected in maintaining a cooperative program in connection with public schools:

Of 40 institutions reporting the use of public schools, only 10 report joint control of these schools by the institution and public-school authorities. More than 30 institutions report the use of training schools over which they have little or no administrative control. No institution reports complete control of public schools not owned by the institution. This means that the most significant activity of the entire teacher-training program of the institution is conditioned by the exigencies of purely local public-school situations, with continued possibilities for friction, and even actual hostilities toward important and necessary aspects of student teaching. Educational experimentation in the public schools utilized for training is commonly viewed with suspicion by parents, and often effective opposition is encountered on their part and on the part of local school officials. Desired classes and units of instruction for student teachers are often hard to arrange on the high school schedules. Institutional training officials are frequently unable to secure satisfactory public-school teachers for demonstration lessons. Desired sequences in the presentation of instructional units is difficult when the exigencies of a public-school program must be met. For every unusual departure from the usual public-school routine, time-consuming arrangements must be made by institutional authorities, with public-school teachers or other outside authorities over whom little or no control is exercised. It is small wonder that most staff members and officers engaged in directing student teaching nearly always wish a campus school as one part of their laboratory training facilities.

One difficulty experienced by land-grant institutions in the use of public schools for student teaching is indicated by the number of student teachers spending excessive time in travel to and from practice schools. Time is lost in regular class work, in the limited student-teaching period or in the study periods of student teachers. About three-fourths of the institutions report that they have student teachers spending one-half an hour or more per day in travel to and from training-school classes.¹⁴

Attitude of State University officials.—Having in mind such difficulties as stated or implied in the above quotation, the following

¹⁴ *Survey of Land-Grant Colleges and Universities*, p. 192. Bulletin, 1930, No. 9. Washington: United States Office of Education.

question was submitted to the heads of the education departments of the 29 state universities with cooperative programs: "Do you have difficulty maintaining pleasant and adequate working relations with the public schools?" Each made a definite reply. Of these, 21 indicated no difficulty, four stated they experienced difficulty, and the other four gave the following replies: "nothing serious"; "sometimes parents object"; "pleasant, but adequacy could be improved if we had a greater measure of self-determination"; "not with teachers and officials. Some parents have made complaint."

These replies seem to indicate that, though the demands of the universities upon the public schools may be conservative, the majority of cooperative programs are being administered with little or no friction between the universities and the public schools.

Influence on Public School Personnel.—In two institutions visited by the writer, it was evident that the morale of the administrative and teaching personnel of the public schools had been disturbed as a result of the cooperative program. In one case, there seemed to be friction between two members of the administrative staff of the public school which seems to have originated when the individual occupying the less important position in the public schools was given college rank and increased salary because of his more intimate connection with the teacher-training program. In the other situation, the difficulty seemed to be due to the fact that officials of the university and the public schools were depending more on the terms of the contract than on sympathetic understanding as a basis of operation. The friction, which developed in the latter situation as a result of each party insisting on his rights, pervaded the personnel of the entire teaching staff. In order to determine whether these were typical or exceptional cases, a personal letter was directed to 37 superintendents who now have, or have recently had, one or more high schools used by state universities in connection with their respective teacher-training programs. Four questions were asked with the understanding that the name of no individual or institution would be used in connection with the information submitted. The following questions were asked:

As a result of the teacher-training program in connection with your school system:

1. Has the morale of your administrative and supervisory staff been influenced (a) favorably?..... (b) unfavorably?.....
2. Has the morale of your teaching staff been influenced: (a) favorably?..... (b) unfavorably?.....

3. Has the efficiency of instruction been influenced (a) favorably?.....
 (b) unfavorably?.....
 4. As a whole, does public opinion favor directed (practice) teaching in your schools?

Thirty-two of the superintendents made replies. Table XI gives a summary of the replies to the first two questions. It will be noted that the influence on the administrative personnel has been favorable in 27 instances, unfavorable in three cases, and neutral in two. The influence on the teaching personnel has been favorable in 28 instances, unfavorable in three, and neutral in one. These data seem

TABLE XI

INFLUENCE OF THE TEACHER TRAINING PROGRAM ON THE ADMINISTRATIVE AND TEACHING PERSONNEL OF THIRTY-TWO COOPERATING PUBLIC SCHOOL SYSTEMS

Officials	Favorable	Unfavorable	Neither
Administrators and supervisors.....	27	3	2
Teachers	28	3	1

The numerals in the table represent frequency of replies. For example, the first column of the table would be read thus: 27 superintendents reported that the administrators and supervisors of their respective school systems had been influenced favorably by the teacher-training program, and 28 superintendents reported that their teachers had been influenced favorably.

to indicate that it is not only possible to operate a cooperative program without detriment to the morale of public school administrators and teachers, but that the cooperative relationship has, in most cases, a beneficial influence on such personnel. However, assuming that these data are accurate, the fact that the administrative and teaching personnel have been influenced unfavorably in approximately 10 per cent of the cooperating public schools is significant and points to dangers that may not safely be neglected in an attempt to operate a cooperative program.

Several of the questionnaires which were returned were accompanied by letters from interested superintendents. Quotations from three of these letters indicate as many different points of view. One superintendent writes:

It would be much easier for the school management because of criticism, complaints, and adjustments that must be met, if practice teaching could be cared for exclusively without the School System; but because of the fine service of the University to the State and to the Community, I feel, as long as we have their courteous cooperation, the public schools should render to the University Department of Education, all reasonable assistance in the matter.

Another superintendent writes in a more optimistic vein as follows:

We feel there is a distinct advantage to our high schools growing out of this relationship. Our instructors become the teachers of teachers and are stim-

ulated to professional activity. Some years ago the tendency was for the University to use quite exclusively the high schools near the University. I felt that this was unfair to the outlying schools, so have been instrumental in having the practice teachers assigned to all high schools. I did this in order that all of the schools might have the benefits.

A still different point of view is registered in the following quotation from another superintendent:

The real problem, as I see it, is to bring the two elements into a realization of their cooperative opportunities. Each is likely to guard overzealously their autonomy or their authority. A happy arrangement would be one in which the two parties could be rather definitely merged in their institutional aspects and more definitely differentiated in their functions. There are really very few experiments worth while from the university point of view in which the school district should not be equally interested. Demonstrations worth making usually have enough credit for both groups. Observation and directed teaching have beneficial outcomes about equal for both groups. The university's demand for autonomy and the district's demand for authority are the chief barriers to successful programs, no doubt.

The Attitude of the Public.—From what has been said already, one might guess that the public, especially parents of the pupils affected, would not always approve the activities involved in the operation of a public school as a laboratory for directed teaching. It was with the expectation that some light might be shed upon this aspect of the problem that the fourth question was submitted to 37 superintendents through the letter mentioned above. The question was, "As a whole, does public opinion favor directed (practice) teaching in your schools?" Of 31 superintendents giving replies on this point, 14 stated that public opinion favored directed teaching in the public schools, five indicated definite opposition, three said opinion was divided, and seven indicated that there was no objection. These figures are quite suggestive when studied in connection with the possibility of a public relations program as a factor in the cooperative scheme.

Efficiency of Instruction in Cooperating Public Schools.—One of the most important problems involved in the use of public schools for directed teaching purposes is evidently that of protecting the welfare of the public school child. Studies made by Franzen,¹⁵ Waddell,¹⁶ Seamster and Davis,¹⁷ Heilman,¹⁸ Allen,¹⁹ Ludeman,²⁰ Carpenter and Frost,²¹ and others seem to indicate that pupils do not lose because

¹⁵ Carl G. F. Franzen. *A Comparison of the Results Made on Certain Standardized Tests by Pupils in the Bloomington High School Who Were Taught in Classes of the Same Grade by University Student Teachers and by Regular High School Teachers.* Bulletin of the School of Education, Indiana University, II, No. 4 (March, 1926). Bloomington, Indiana: Bureau of Cooperative Research.

¹⁶ Charles W. Waddell, "Some Basic Considerations in Evaluating the

of student teaching. It must be borne in mind, of course, that all results of teaching are not measurable. It is quite possible also that studies revealing facts unfavorable to the cooperative program have not been published. Engleman, at least, expresses doubt, in spite of the results of published studies, that inexperienced teachers can do as good a job in the instruction of children as the well trained teacher.²² It is believed by those who think that pupils do not lose in schools used for student teaching that the inexperience of the student teacher

TABLE XII

INFLUENCE OF STUDENT TEACHING ON EFFICIENCY OF PUPIL INSTRUCTION

Reply	Frequency
Favorably	24
Unfavorably	4
Neither	4
No reply	5

is offset by the superiority of the supervising teacher as compared with the average public school teacher, the additional attention that can be given to individual pupils because of the assistance of student teachers, and because the student teacher is motivated to do her best.

Attention has already been called to the personal letter addressed to each of 37 public school superintendents who now have, or have recently had, experience with student teaching in their respective schools. An attempt was made to secure the opinion of the superintendents with respect to the efficiency of instruction in so far as it had been influenced by the student teaching program. Table XII, a summary of the replies, indicates whether instruction had been influenced favorably or unfavorably.

It is not known how many of these replies were based on objec-

Activity School," *Educational Administration and Supervision*, XVI (October, 1930), 483-94.

¹⁷ Frederick C. Seamster and Robert A. Davis, "The Efficiency of Training School and Public School Pupils," *Educational Administration and Supervision*, XVII (March, 1931), 224-31.

¹⁸ J. D. Heilman, "The Child's Loss Due to Student Teaching," *School and Society*, XXI (March 7, 1925), 296-97.

¹⁹ J. William Allen, "A Comparison of Teacher Training Centers with Schools Having a Population of Like Ability," *Educational Administration and Supervision*, XV (March, 1929), 184-89.

²⁰ W. W. Ludeman, "Do Pupils Lose Under Practice Teachers?" *Educational Administration and Supervision*, XIV (February, 1928), 101-4.

²¹ W. W. Carpenter and Marion K. Frost, "What Effect Do Visitors Have upon the Recitation?" *Journal of Educational Research*, XXII (June, 1930), 50-53.

²² J. O. Engleman, "Supervised Teaching in Teacher-Training Schools from the Viewpoint of the City Superintendent," *Educational Administration and Supervision*, XIII (May, 1927), 323.

tive evidence. It is known that objective appraisals had been made in at least two instances. It should not be surprising that 75 per cent of the superintendents report that in their opinion the efficiency of instruction had been influenced favorably. Might we not ask how the public school could justify the cooperative relationship unless the results of instruction under such an arrangement were believed to be at least the equivalent of the results obtained by the average teacher in the system.

The Problem of Transportation.—One of the disadvantages usually mentioned in the discussion of the off-campus school as a laboratory for student teaching is the matter of transportation. Two problems are involved here; namely, the expense of transportation and the time wasted by students and teachers in going to and returning from the off-campus school.

In an attempt to estimate the expense to the university of providing for student teaching by means of a cooperative arrangement, the two following questions were asked the heads of the education departments of the 29 universities with cooperative programs:

1. For what amount does your budget provide for transportation of student teachers this year (1930-31)?
2. Does your institution collect a transportation fee from student teachers?

Twenty-six of the 28 institutions reporting on this point indicated that their respective budgets made no provision for transportation of student teachers and that no transportation fees were collected. In one university, a bus is provided for transportation of students and a fee of \$2.00 per credit hour is collected from each student teacher. Another university furnishes automobiles for the students who have directed teaching in the county high schools but the student pays no fee. According to these data, transportation is not an item of expense to the universities with the two exceptions mentioned. Information is not available with respect to the cost of transportation to the student.

The time element involved in going to and returning from the off-campus school is probably much more important than the cost of transportation. Hoping to get some fair conception of this difficulty as it exists in the 29 universities under consideration, the heads of education departments were asked: "Approximately, what is the average time consumed by a student going to and returning from directed teaching? (This is not to include the time in class.)" Twenty-six made definite replies. In three instances, the students leave the campus during the period of directed teaching, and in another, the

students give full time in the high school of the local school system during the period of directed teaching. Table XIII shows the time required in the remaining 22 situations, according to the reports.

While these figures do not indicate the loss of as much time as one may have been led to believe, it is clear that very few, if any, of these institutions would be able to schedule the college and high school work in such a way that the student teacher would be able to make

TABLE XIII
AVERAGE TIME CONSUMED BY STUDENT TEACHERS
GOING TO AND RETURNING FROM DIRECTED TEACHING

Time required	Frequency
10 minutes	1
20 minutes	4
30 minutes	8
60 minutes	1
10 to 30 minutes	1
15 to 40 minutes	1
20 to 30 minutes	2
20 to 40 minutes	1
30 to 40 minutes	2
40 to 50 minutes	1

connection between the two places without allowing a period between the class at college and the class at high school. The same difficulty would be experienced in case of college teachers who might have duties at both places.

Directed Teaching in the Summer Session.—The provision of facilities for directed student teaching during the summer session is a problem in most teacher training institutions regardless of whether or not the institution is dependent upon the public schools. Of the 29 institutions with cooperative programs submitting data on this point, eight indicated that high school facilities were available for observation and directed teaching during the summer, and that the same directed teaching standards were maintained during the summer session as during the regular session. Three of these schools, however, indicated that the subject matter field in which directed teaching could be done was more limited during the summer session. It was indicated that 21 of these institutions did not have high school facilities available for directed teaching during the summer session.

As will be pointed out in a later section, 11 out of 20 of the state universities which support university high schools operate these schools during the summer session. In other words, 55 per cent of the state universities which control schools on the secondary level operate these schools during the summer session, whereas only 28

per cent of the state universities dependent upon cooperative arrangements have high school facilities available. Assuming that high school facilities for directed teaching during the summer session are desirable, these figures seem significant.

SUMMARY

The nature of the cooperative programs as a means of providing directed teaching facilities in the 29 state universities which do not have campus schools on the secondary level vary widely. At one extreme, the cooperative program provides for nothing more than un-directed observation and, at the other extreme, it serves every purpose of a well organized university owned and controlled school. Between these two extremes we find various types of arrangements.

The contractual relations between state universities and cooperating public schools vary from that situation in which no written contract has existed for many years to another in which the terms of the agreement have been rigidly defined and written into state law. The continuous contract seems to be more popular than that type of contract which is renewable periodically.

The annual cost of providing directed teaching by means of a cooperative program ranges from nothing to \$697 per student teacher. According to figures presented for 20 institutions in Table III, the annual cost for the median institution is \$64 per student teacher, or when all figures are combined, the mean annual cost per student teacher is \$128.

While a few institutions do not remunerate the teachers of cooperating schools for supervising student teaching, it is the general practice to pay a fee of \$10 to \$40 per student teacher supervised, or to subsidize the teacher's salary. Twenty-one of the institutions do not pay the principal of the cooperating school, and 24 do not pay the superintendent; in seven instances, a portion of the principal's salary, and in four instances a portion of the superintendent's salary, is paid by the university.

The cooperating teacher who supervises student teaching is not allowed college rank in 17 instances, and is eligible for rank on a professorial basis in only two cases. Practice is even less favorable with respect to college rank for the principal or superintendent of cooperating schools.

The assignment of student teachers and the general supervision of student teaching is done in a majority of cases by a supervisor of directed teaching. In a few instances, however, this is done by the

public school superintendent, the dean, professors in the education department, or supervisors.

Of 27 institutions submitting information on the point, the selection of supervising teachers is initiated by the university authorities in only 10 instances. Selection of these teachers must be made from the staff already employed in at least 12 situations.

With only three or four exceptions, the cooperating teachers carry full teaching loads in addition to supervising student teaching. Scheduled conferences with student teachers which is one aspect of the teaching load, vary from one each day in the case of seven institutions to no conferences in four others.

Approximately all of the teachers in the cooperative program have at least the Bachelor's degree. The number of Master's degrees range from none in one institution to 100 per cent in two others. Eight teachers scattered through six institutions have the Ph. D. degree. The training of cooperating teachers, however, is inferior to that of teachers in university high schools.

In so far as is shown by professional literature, observation in several institutions, and reports from the 29 state universities with cooperative arrangements on several significant points, the cooperating school generally functions in a very small way as a laboratory school beyond that of providing opportunity for observation and directed teaching.

Data from university officials indicate that most of the cooperative programs operate without friction; however, there is evidence that adequate and pleasant working relations are difficult to maintain in several instances.

Published studies and opinions of superintendents of cooperating schools indicate that pupils do not lose because of student teaching in the public schools.

Although transportation does not seem to be a problem from the standpoint of cost, in most instances, the time element involved does seem to be important. The time required to go from the university to the school used for student teaching is such that very few, if any, of the 29 institutions would be able to schedule college and high school classes in such a way that the student teacher would be able to make connections between the two places without allowing a period between the class at college and the class at the high school.

Only 28 per cent of the state universities which are dependent upon cooperative arrangements have directed teaching facilities available for the summer session. On the other hand, 55 per cent

of the state universities which control schools on the secondary level operate these schools during the summer session.

SUGGESTIONS FOR ADMINISTRATIVE GUIDES

The material of this chapter suggests the need for evaluated guides in the administration of public high schools as laboratories for directed teaching. The following problems, difficulties, or suggestions are evident:

1. What rights should be reserved by public school authorities and what privileges should be guaranteed to the university in a co-operative program?
2. Should the terms of the agreement and duties of personnel be defined in a written contract?
3. Should cooperating laboratory schools be exempt from general state legislation with respect to organization, curricula and textbooks?
4. Has the community the right to expect instructional advantages and outcomes under the cooperative program equal or superior to those formerly enjoyed?
5. Where extra cost is involved in providing superior teachers, equipment, etc., in a cooperating program, who should bear the extra burden?
6. What part should a public relations program have in a co-operative plan?
7. In dealing with the personnel of the cooperating public school, what should be the policy of the university and public school authorities with respect to selection, qualifications, rank, pay, and teaching load?

Among other questions that might be raised in light of the discussion in this chapter, enquiry might legitimately be made concerning the importance of public school activities over and above those of formal directed teaching, the extent of supervision of all activities, the desirability and frequency of conferences, the integration of theory and practice, and nature of laboratory facilities for the summer session.

CHAPTER IV

THE ADMINISTRATION OF UNIVERSITY HIGH SCHOOLS

THE administration of a university high school involves many complex problems. In addition to the usual administrative problems common to the public high school, many others grow out of the several functions of the university high school beyond those of the public high schools. Naturally, in this discussion, emphasis will be on those phases of administration which are the result of the peculiar functions of the university high school.

The discussion of this chapter will be organized under the following general headings: (1) functions of the university high school, (2) organization, (3) administrative procedure and personnel, (4) teaching personnel and related problems, (5) clerical personnel, (6) pupil personnel, (7) the program of studies, (8) efficiency of instruction, (9) student teaching and related problems, (10) other functions of the university high school, (11) related administrative problems, (12) the university high school building, and (13) cost of operation.

FUNCTIONS OF THE UNIVERSITY HIGH SCHOOL

In order to determine the various functions claimed for the university high school, official publications of the 20 institutions concerned were examined and note was made of the various functions indicated. The results are shown in the first column of Table XIV.

TABLE XIV

FUNCTIONS OF LABORATORY SCHOOLS AS INDICATED BY OFFICIAL PUBLICATIONS
AND PROFESSIONAL LITERATURE

Functions Claimed for Laboratory Schools	Frequency of Mention in	
	Official Publications	Professional Literature
Directed teaching	18	14
Observation and participation	15	14
Experimentation	9	10
Demonstrate good practice in teaching, supervision, and administration	4	1
Superior training for pupils	7	0
Model school for educators of state	1	3
Responsible or apprentice teaching	0	3

This table shows the frequency of mention of the various functions claimed for the university high school in the official publications of the 20 state universities under consideration, and the functions mentioned in professional literature in connection with laboratory schools in general.

No statement was found concerning this matter in the bulletins of one institution.

Table XIV shows that 18 of the remaining 19 institutions expect the university high school to serve as a laboratory for directed teaching. One university does not provide for directed teaching. While it is quite probable that all of the university high schools are used for observation and participation, at least in a limited sense, this objective was stated in the official literature of only 15. Official bulletins indicated that nine institutions expect the university high school to provide facilities for experimentation;¹ seven claim to provide superior high school training for the pupils enrolled;² four would have the school demonstrate or exemplify good practice in teaching, supervision and administration; and one expects it to serve as a model school for educators of the state.

The following quotations with reference to four different institutions serve to illustrate proposed functions of the university high school as indicated by official bulletins:

The College of Education of the University of Illinois, recognizing the importance of some kind of worthwhile educational practice, established its University High School which has been designed to serve three purposes: first, to act as an experimental laboratory for various types of investigations which seem to be desirable in the advancement of the science of education; second, to serve as a model school for the educators of Illinois; and third, to present opportunities for worthwhile observation on the part of students planning to become teachers and to give them actual experience through daily contact with actual class work under as desirable conditions as possible.³

The University High School was created for the purpose of improving instruction in the junior and senior high schools of Michigan. To accomplish this purpose two main things are attempted: first, to help those who are preparing to teach, by demonstrating good practice as used in the best schools through the country, directing the observations of student teachers, and arranging for them a certain amount of actual participation; and, second, seeking to discover, through investigation and experimentation, in what ways the methods now in use can be improved.⁴

University High School has for its aim an education of the highest caliber for the pupils which is made possible by an expert teaching staff, and excellent instructional facilities. Experimentation and research in education enables the staff to present that content which has been found to be most desirable

¹ Experimentation is used here in a broad sense and includes controlled studies, testing out methods and procedures, curriculum development, etc.

² It is probable that each institution assumes that this function is taken for granted.

³ *Teacher Training in the University High School*. University of Illinois Bulletin, XXVI, No. 24 (February 12, 1929), p. 4. Urbana, Illinois: University of Illinois.

⁴ *School of Education Announcement, 1931-32*. University of Michigan Official Publication, XXXII, No. 62 (May 2, 1931), p. 123. Ann Arbor, Michigan: The University of Michigan Press.

by means of the best methods of educational procedure, which is so conducted that observation is very much worthwhile.⁵

The purpose of the Teachers College High School is to furnish pupils a high school education built upon unusual opportunity, excellent teaching, and a large degree of attention to individual differences. A further service offered by the Teachers College High School is the training of University seniors and graduate students for public school service by offering the opportunity for student teaching, experimentation, and research in the field of education.⁶

Professional literature dealing with the laboratory school was examined for the purpose of determining whether or not there were other functions advocated for the laboratory school which were not indicated in official publications. Tabulations of functions, which were indicated or clearly implied, were made from 16 books, magazine articles and bulletins.⁷ It should be kept in mind that references to laboratory schools in these books or articles were made in a general sense, or to those of teachers colleges. The second column of Table XIV shows emphasis on directed teaching, observation and participation, and experimentation.

There seems to be less emphasis on demonstration of good practice and greater emphasis on the laboratory school as a model school than is indicated by the tabulation from official publications; however, it is probable that both groups had in mind much the same function. We find three writers indicating that laboratory schools should provide for apprentice or responsible teaching. This has reference to a teaching period beyond that of directed teaching as this is generally known. However, it is not indicated that this should be done in the campus school.

It should be noted here that at least five writers recognized as one of the functions of the laboratory school observation and demonstration in connection with education courses. A separate tabulation was not made of this item because most of the official publications did not make it clear as to the extent facilities were provided for this purpose.

⁵ *Announcement of the University High School for 1930-31.* Bulletin of the State University of Iowa, New Series No. 542 (January 18, 1930), pp. 6-7. Iowa City, Iowa: State University of Iowa.

⁶ *Teachers College High School Announcements for the Session of 1930-31.* Bulletin of the University of Nebraska, Series XXXV, No. 16 (April 22, 1930), p. 9. Lincoln, Nebraska: The University of Nebraska.

⁷ A large number of books, articles, and bulletins were examined, but tabulations were made from 16, in each of which one or more phases of this problem were treated. This procedure seemed to serve the purpose. A list of the publications from which the tabulation was made may be found in Appendix D, page 149.

These various functions claimed or advocated for university high schools raise two important problems: (1) the difficulty of realizing so many more or less unrelated objectives in the same school; and (2) the difficulty of providing for the administration of these more or less unrelated activities without the obstruction of one by another, or without friction of personnel.

ORGANIZATION

According to the classification made in Chapter II of this study, there are 20 university high schools connected with education departments of state universities.⁸ The enrollments in these schools range from 46 to 383 pupils.⁹ The median school has an enrollment of 178.5, and the mean enrollment is 190.5.

The organization of the schools with respect to the grades included varies. Table XV shows the number of grades included in each school.

TABLE XV	
GRADES IN UNIVERSITY HIGH SCHOOLS	
Grades included	Frequency
Grades 10 to 12	2
Grades 9 to 12	7
Grades 7 to 11	2
Grades 7 to 12	9
TOTAL	20

The two schools which include Grades 7 to 11 are located in states that have the 11 year system of schools. The tendency seems to be in favor of a five or six year school.

As a group, there is nothing unusual about the organization of these schools with respect to time units. The length of the school year is 36 weeks for each of the 19 schools for which figures were available. The length of the school day ranges from five to eight hours. The school day of the median school is six hours. The average school day is 6.2 hours. The class period varies from

⁸ There is a university high school connected with each of the following institutions: University of Arkansas; University of Illinois; University of Iowa; University of Kansas; University of Kentucky; Louisiana State University; Miami University; University of Michigan; University of Minnesota; University of Mississippi; University of Missouri; University of Nebraska; University of North Dakota; University of Oklahoma; University of Oregon; University of South Dakota; West Virginia University; College of William and Mary; University of Wisconsin; University of Wyoming.

⁹ This information was obtained from the 1929-1930 reports of these schools to their respective regional accrediting agencies.

40 minutes in one school to 80 minutes in another. The class period of the median school is 54 minutes, and the mean, or average, class period for the 20 schools is 54 minutes.

ADMINISTRATIVE PROCEDURE AND PERSONNEL

An examination of the practices in the various university high schools reveals several types of administrative procedure devised for the purpose of carrying on the regular high school activities and those activities incident to directed teaching, experimentation, etc. As a result of numerous conferences with administrative officials, it appears that when one is confronted with the task of formulating plans and policies for the administration of a university high school, the following questions will probably come up: (1) Who shall be responsible for the administration of the high school activities and those activities involved in directed teaching? (2) Who shall determine high school policies? (3) How may contact be established between the high school and other departments of the university? (4) To whom shall the high school principal be responsible? (5) What should be the qualifications of the principal? (6) What should be the official status of the principal? This section will be concerned with present practices as related to these problems.

Administration of High School and Directed Teaching Activities.—It is difficult to find two institutions where exactly the same procedures are followed. In one large university, we find the principal of the high school in full control of the high school and teacher training activities with only such assistance as may be obtained through delegation of authority to teachers and department heads. In another institution, which has one of the largest high schools, the principal is responsible for the administration of the high school, and the director of the high school, who is a professor of secondary education in the college of education, is responsible for the education policies of the high school. In another institution, the supervisor of directed teaching is also principal of the high school, but details of administration are delegated to a vice-principal. In another institution, the director of student teaching is in charge of the administration of student teaching in all departments on the campus, supervises student teaching, has general charge of the high school with such duties as appointment of teachers, determination of financial matters, decision in conference with the dean of the college of education as to policies in the high school, and general supervision of the instructional activities of the school.

The principal is responsible for the general administration of the high school activities and, in part, for the instructional duties of the high school teachers. In still another institution, the supervisor of directed teaching is responsible for all directed teaching activities and the supervision of instruction in the high school, and is head of one of the subject matter departments of the high school. The principal, who is coordinate in authority with the supervisor of directed teaching, is responsible for the general administration of the high school. These two officials, together with the dean of the education department, form a committee which determines high school policies and acts as a *laisson group* concerning those functions and activities that overlap or that are not clearly within the field of activity of the principal or supervisor of directed teaching.

While these cases are typical of such variations as one will find in administrative organizations and procedures as he goes from one institution to another, some light may be thrown upon the general situation by pointing out that in eight of the 20 institutions, the same individual is responsible for the administration of the high school and directed teaching activities. In the remaining 12 institutions, the individuals who are responsible for directed teaching may be classified as follows:

Title of Official	Frequency
Supervisor of directed teaching	3
Director of teacher-training	1
Director of high school	2
Director of supervised teaching	2
Director of student teaching	2
Professor of secondary education	2

First hand information concerning several of these institutions indicates that the title of the official does not imply the extent of his duties and responsibilities. There is genuine concern, however, in some quarters as to whether the coordination of the various administrative functions can be accomplished best by combining into one office the principalship of the high school and the supervisorship of directed teaching, by centering the responsibility for the coordination of these functions in the dean of the education department, by setting up a coordinating committee, including the dean, the principal and the supervisor of directed teaching, by making the principal subordinate to the supervisor of directed teaching, by making the supervisor of directed teaching subordinate to the principal, or by some other plan.

Determination of High School Policies.—According to information submitted by the principals of the 20 university high schools under consideration, there is no common procedure among these institutions in determining high school policies. Because of the importance of and apparent interest in this particular matter, the replies from each institution as to who is responsible for determining high school policies are indicated in Table XVI.

It is noticeable that in all cases, except institutions 1, 4, and 11, the determination of high school policies is a cooperative proposition.

TABLE XVI

OFFICIALS RESPONSIBLE FOR DETERMINING UNIVERSITY HIGH SCHOOL POLICIES

Institution	Principal	Supervisor of Directed Teaching	Director of Teacher Training	Director of High School	Dean of Education Department	Faculty of High School	City School Board
1.....			X*				
2.....	X†				X	X	
3.....	X			X			
4.....			X				
5.....			X			X	
6.....						X	
7.....	X		X				
8.....	X	X			X	X	
9.....		X			X		
10.....	X	X			X	X	
11.....				X			
12.....	X†	X				X	
13.....	X					X	
14.....					X	X	
15.....	X	X			X	X	
16.....	X	X			X		
17.....	X					X	
18.....	X				X		X†
19.....	X					X	
20.....	X				X		

This table may be read as follows: In institution No. 10, university high school policies are determined by the principal of the high school, the supervisor of directed teaching, the dean of the education department, and the faculty of the high school.

* This individual also acts as principal of the university high school.

† This school is jointly owned and operated by the college and city.

‡ The principal of this school is also supervisor of directed teaching.

As might be expected, the principal of the high school is the most important figure in determining high school policies. He is specifically mentioned in 13 cases. In the case of institutions 1 and 4, the director is also the principal. In the case of institutions 5, 6 and

14, it may be implied that he is a part of the high school faculty. It is also significant that the faculty of each of 11 of the high schools have a voice in determining high school policies. The deans of the education departments, according to these data, help determine high school policies in nine instances. It is probably significant that 12 supervisors of directed teaching, directors of teacher-training, or directors of high schools have a part in this important work.

Inter-departmental Relations.—Much has been said concerning the correlation of the work of the training school and other departments with respect to the normal school, or teachers' college. For example, Learned, Bagley, and others, deploring the fact that "the most significant weakness of the courses in observation, participation and practice teaching is in the general lack of a satisfactory correlation of all the work of the normal school with the training school," point out that the trouble is usually due to a complete mechanical separation of the training department, both from the department of education and from the academic department.¹⁰ In describing the work of the college high school at Montclair, New Jersey, Flowers says that "the work is so integrated that, in time, each college staff member teaches classes of high school boys and girls. . . . Administratively, this leads to a close tie-up between the theoretical and practical aspects of teacher training."¹¹ Evenden apparently would not agree with the arrangement at Montclair, but would advocate a director, coordinate in position, rank and salary with the head of the department of education who would serve as chief coordinator between the subject-matter and theory teachers on the one hand and the demonstration teachers on the other.¹²

The question of interrelationship of the university high school and other departments is a much greater problem in the state university than in the teachers' college because, if for no other reason, teacher training is only one of the many functions of the university, a new function against which many members of other departments are prejudiced. In the minds of some, at least, these very obstacles make it important that contact be made with other departments by representatives of the university high school. For example, in one

¹⁰ W. S. Learned, W. C. Bagley, and others, *Professional Preparation of Teachers for American Schools*. Bulletin No. 14 (1920), p. 198. New York: The Carnegie Foundation for the Advancement of Teaching.

¹¹ John G. Flowers, "Organization of Teacher Training Program," *Educational Administration and Supervision*, XVII (May, 1931), 362.

¹² E. S. Evenden, "Cooperation of Teachers of Academic Subjects with the Training School," *Supervisors of Student Teaching*, Fifth Annual Session (1925), p. 9.

state university, the heads of subject-matter departments in the university high school teach in the education department and in their respective subject-matter departments of the college of liberal arts. Not only are they in a position to defend the practices of the high school, but the contacts with other departments seem to make them more critical of their own high school practices.

According to data submitted by the principals of the 20 university high schools, 17 have department heads. Of these, the department head does teach, or may teach, in the liberal arts college in four instances and in the education department in 15.¹³ The teachers in 18 of the university high schools do not teach in the education department or the liberal arts college. However, in one institution in which there are no high school department heads, one teacher in each subject-matter department teaches a special methods class; in another institution, three of the high school teachers teach one or more classes in the liberal arts college. One institution reported that two teachers of the education department, and one from the liberal arts college taught part time in the high school. Exactly half of the university high school principals are reported to teach from two to 12 hours per week in the education department.¹⁴

Relationship of Principal to Other Officials.—It has been pointed out already that the principal may have the full responsibility of the high school and teacher-training activities, or his responsibility may be limited to administrative details of the high school. This suggests an inquiry as to whom the principal is responsible. The data submitted by 20 university high schools indicate that the principal is responsible to the dean of the education department in 14 cases, to the director of teacher-training in two, to the supervisor of directed teaching in one, and to the dean and supervisor of directed teaching in another. It would be possible to present evidence to show that some very delicate situations may depend upon the official relationship and responsibility of the principal and other administrative officers. In addition to the problem of official relationships of administrative officers, we have the closely related problem of overlapping duties and disorganization growing out of the unrelated activities as a result of the varying functions of the university high school and types of personnel varying according to these functions.

¹³ In about half of the university high schools, the department head may attain the professorial rank.

¹⁴ Six principals teach in the high school only, seven teach in the education department, three teach in both high school and education department, and four do not teach.

One might well raise the question as to what extent the duties of the individuals connected with the university high school, directly or indirectly, should be defined.

Rank and Pay of the Principal.—In 12 of the 20 state universities which have university high schools, the principal is eligible for the same privileges, rank, and pay that are accorded other members of the education department. In eight of these, however, the principal and supervisor of directed teaching are the same.¹⁵ In eight of the institutions, the principal is not eligible for the same privileges, rank, and pay as other members of the education department.

According to data contained in the reports of university high schools to their respective accrediting agencies, and similar reports of 18 public high schools located in the same communities as 18 of the university high schools, the principal of the university high school is paid a salary somewhat better than principals of the public high schools. Table XVII shows that the lowest salary, highest salary, and average salary of the university high school principal

TABLE XVII
SALARIES OF PRINCIPALS OF UNIVERSITY HIGH SCHOOLS AND CITY HIGH SCHOOLS LOCATED IN THE SAME COMMUNITY

Type of School	Low Salary	High Salary	Aver. Salary
University high schools	\$2,300	\$5,500	\$3,439
City high schools*	2,000	4,900	3,237

This table may be read as follows: The lowest salary received by a university high school principal is \$2,300, the highest is \$5,500, and the average salary for the university high school principal is \$3,439.

* The figures for city high schools refer to 18 high schools in the same communities as 18 of the university high schools.

exceeds respectively the low, high and average salary of the public high school principal. It should be noted, however, that in the 18 communities where figures are available for both types of schools the salary of the university high school principal exceeds that of the public high school principal in only half of the cases.

Since the salary is discussed because of its significance in relation to the selection of properly qualified principals, it should be remembered that there are other factors which make the position of the university high school principal desirable; for example, the school is usually smaller, prestige is greater, the situation is more stimulating, and so on.

Qualifications of the Principal.—According to data contained in

¹⁵ No one was reported acting in the capacity of supervisor of directed teaching who was not eligible for the same privileges, rank, and pay as other members of the education department.

the 1929-30 reports to the North Central Association and similar accrediting agencies, the qualifications of the university high school principals, as indicated by sex, degree, professional training and previous experience are superior to those of public high school principals of the same communities.

Table XVIII shows that all of the university high school principals are men, that 25 per cent hold Doctor's, and 70 per cent Master's degrees, that the average professional training amounts to 62 semester hours, and that the average previous experience amounts

TABLE XVIII

COMPARISON OF QUALIFICATIONS OF UNIVERSITY HIGH SCHOOL PRINCIPALS AND PRINCIPALS OF PUBLIC HIGH SCHOOLS LOCATED IN THE SAME COMMUNITIES AS INDICATED BY SEX, DEGREES, PROFESSIONAL TRAINING AND EXPERIENCE

Types of Schools	Sex		Degrees			Average Number of Hours of Education	Average Number of Years of Previous Experience
	Per cent		Per cent				
	Male	Female	Bachelors	Masters	Doctors		
University high schools....	100.0	0.0	5.0	70.0	25.0	62	19.5
Public high schools	88.9	11.1	55.6	44.4	0.0	40	16.5

Data contained in this table were taken from the North Central Association and similar reports.

The table may be read as follows: 100 per cent of university high school principals are male; 5 per cent hold Bachelor's, 70 per cent Master's, and 25 per cent Doctor's degrees; the average professional training of the university high school principal amounts to 62 semester hours of education and his average experience is 19.5 years.

to 19.5 years. The same table shows that 88.9 per cent of the public high school principals are men, 44.4 per cent hold Master's degrees, and the remainder Bachelor's degrees, that the average professional training amounts to 40 semester hours, and that the average previous experience amounts to 16.5 years.

While successful experience, and adequate academic and professional training are essential as a part of the equipment of the university high school principal, the nature of the university high school, its personnel, its function, and its relation to other departments, to the state and to the community suggest other qualifications that might be considered essential; e.g., quality of cordial cooperation, efficiency in personnel management, efficiency in handling public relations problems, familiarity with school conditions and school needs of the state, familiarity with recognized procedure in teacher training, and knowledge of philosophy underlying teacher training activities.

TEACHING PERSONNEL AND RELATED PROBLEMS

In considering this topic, we are naturally interested in the relationship of teaching personnel to the realization of the peculiar functions of the university high school, and especially are we interested in those factors related to the selection and retention of properly qualified teachers. This section, therefore, will be concerned with the qualification, the teaching load, the rank, the pay, the tenure and the method of selection of the teaching personnel of the university high school.

Qualifications of Teachers.—It is quite probable that most people would agree with the following statement:

The best teaching anywhere should be done in the school devoted to supervised teaching, training school teachers should be thoroughly grounded in academic phases of their subjects, and they should be able to present in faultless style, to their pupils and to college students, the classwork that is given them to do.¹⁶

We may not be able to obtain objective evidence as to the type of teaching that is being done by the university high school teachers, but we are able to assemble data bearing on those matters which are usually taken into consideration when an attempt is made to determine the qualifications of a teacher. Such factors as sex, professional and academic training for the subject taught, experience, and other desirable qualifications will be discussed.¹⁷

According to the data submitted by the 20 university high schools to their respective regional accrediting agencies, 40.9 per cent of the teachers are men and 59.1 per cent women. Similar data for 18 public high schools located in the same communities as 18 of the university high schools, indicate that 30.6 per cent of the teachers in these public high schools are men, and 69.4 per cent women.¹⁸ No attempt will be made to show the superiority of either sex as teachers. Since some authorities believe that there should be a fair representation of both sexes on the high school teaching staff, these figures may seem important.

¹⁶ L. N. Hines, "The Relationship between the General Administration and the Training School," *The Teachers College Journal*, II (September, 1930), 1.

¹⁷ The data used in this section were taken from the reports of the respective schools for the year, 1929-1930, to the North Central Association and other accrediting agencies except where supplemented by personal correspondence.

¹⁸ In order to have a basis for comparison, an effort was made to secure reports to their respective regional accrediting agencies from a representative public high school located in the community of each of the 20 university high schools. Such reports were secured from one public high school of each of 18 of the communities.

Table XIX shows some very significant figures with respect to the academic and professional training of university high school teachers as indicated by degrees held and the number of semester hours of education completed. It is significant that 42.9 per cent of the university high school teachers hold Master's degrees and 7.8 per cent Doctor's degrees, whereas 20.5 per cent of the public high school teachers under consideration hold Master's degrees and 0.2 per cent Doctor's degrees. It is probable that the teachers of the 18 public high schools are above the average for accredited high

TABLE XIX

ACADEMIC AND PROFESSIONAL TRAINING OF UNIVERSITY HIGH SCHOOL TEACHERS AND TEACHERS OF 18 PUBLIC HIGH SCHOOLS LOCATED IN THE SAME COMMUNITIES*

Item	Maximum Degree Held				Number of Semester Hours of Professional Training		
	No degree	Bachelor's	Master's	Doctor's	Less than 15	15 to 30	Over 30
Percentage of university high school teachers....	5.7	43.6	42.9	7.8	9.1	45.6	45.3
Percentage of public high school teachers....	12.9	66.4	20.5	0.2	15.6	59.3	25.1

The table may be read as follows: The Bachelor's degree is the highest degree held by 43.6 per cent of the university high school teachers; or 9.1 per cent of the university high school teachers have completed less than 15 semester hours in education.

* The data in this table are taken from Forms B and B1 of the 1929-1930 reports, and similar forms of reports to other accrediting agencies. The number of teachers reported on these forms do not always agree with the number reported on Form A. These figures include the high school principals but do not include the superintendents.

schools. According to the 1930 report of the North Central Association, only 19.5 per cent of the academic teachers hold Master's degrees and 0.5 per cent Doctor's degrees.¹⁹ Data collected by the Southern Association in the fall of 1926 show that 11.0 per cent of the academic teachers of schools accredited by the Southern Association and 2.6 per cent of the vocational teachers have Master's degrees, and 0.2 per cent of the academic teachers have Doctor's degrees.²⁰ These data seem to indicate that the average teacher of the university high school has training superior to the teachers of the public high schools of the same communities and training superior to the teachers of the high schools accredited by the North Central Association and the Southern Association.

¹⁹ *The North Central Association Quarterly*, V (June, 1930), 106.

²⁰ Joseph Roemer, *Secondary Schools of the Southern Association*. Bulletin, No. 16 (1928), pp. 37-40. Washington: United States Bureau of Education.

The second part of Table XIX shows that 45.3 per cent of the university high school teachers have had over 30 semester hours of professional training and that 45.6 per cent more have had from 15 to 30 hours of professional training. The same table shows that 25.1 per cent of the teachers of the 18 public high schools have had over 30 hours of professional training. It will also be noted that the number of teachers in the public high schools with less than 15 hours of professional training exceeds those of the university high school with less than 15 hours by 6.5 per cent. Thus it seems

TABLE XX
PERCENTAGE OF TEACHERS OF UNIVERSITY HIGH SCHOOLS AND PUBLIC HIGH SCHOOLS OF SAME COMMUNITIES TEACHING IN THEIR RESPECTIVE ACADEMIC MAJORS AND MINORS

Type of Teacher	Major	Minor	Neither
University high school teachers.....	82.1	11.5	6.4
Public high school teachers	75.2	15.5	9.3

The data from which this table was developed were taken from the reports mentioned in connection with the previous table.

In making these calculations, a teacher was given credit for teaching her major when she was teaching her major subject, or major subject and a subject not in her major field, and credit was given for teaching her minor subject when she was teaching her minor subject, or minor and a subject in neither major nor minor field.

The table may be read as follows: 82.1 per cent of the university high school teachers are teaching subjects in the field of their academic majors.

that the university high school teachers show a significant superiority with respect to professional training.

Closely related to the matter of academic training is the question of whether or not the teacher teaches the subject for which she is prepared to teach. Table XX shows that approximately 7.0 per cent more of the university high school teachers are teaching in their respective major fields than is the case with the public high school teachers, and that approximately 3.0 per cent less of the university high school teachers teach in neither major nor minor field than is the case with the public high school teachers. The superiority of the university high school teacher here is not very great.

Table XXI shows total experience of university high school teachers and teachers of the 18 public high schools involved in the study, and the amount of experience of these teachers in their present positions previous to the year reported. The same table shows very little significant difference in these two types of schools with respect to the total previous experience. However, we do note important differences with respect to the number of years that teachers have served in their present positions. Whereas 23.7 per cent of the university high school teachers are serving their first year,

17.6 per cent their second year, and 14.2 per cent their third year in their present positions, figures for the public high school teachers are 11.7 per cent, 9.7 per cent, and 8.7 per cent, respectively. When we examine the upper end of the scale we see the reverse of this picture; 12.5 per cent of the university high school teachers have been in their present positions 6 to 10 years, and 6.8 per cent over 10 years, while 25.6 per cent of the public high school teachers have been in their present positions 6 to 10 years, and 23.0 per cent over 10 years. These variations are probably due in part to the tendency

TABLE XXI

PREVIOUS EXPERIENCE OF UNIVERSITY HIGH SCHOOL TEACHERS AND TEACHERS OF 18 PUBLIC HIGH SCHOOLS LOCATED IN SAME COMMUNITIES
EXPRESSED IN TERMS OF PERCENTAGES

Experience	0 Year	1 Year	2 Years	3 Years	4 Years	5 Years	6-10 Years	Over 10 Years
Total previous experience of university high school teachers.	1.7	1.7	5.7	8.1	8.8	7.1	22.7	44.3
Total previous experience of public high school teachers	2.2	2.0	3.8	6.3	6.3	4.7	21.0	53.7
Previous experience in present position of university high school teachers.	23.7	17.6	14.2	9.8	5.7	9.8	12.5	6.8
Previous experience in present position of public high school teachers	11.7	9.7	8.7	8.0	6.2	7.2	25.6	23.0

The data in this table are taken from Forms B and B1 of the 1929-1930 reports of the North Central Association and similar forms of reports to other accrediting agencies.

The table may be read as follows: 1.7 per cent of the university high school teachers have had no previous experience, 5.7 per cent have had two years experience, etc.; or 11.7 per cent of the public high school teachers have had no previous experience in their present positions, 23.0 per cent have been in their present position over 10 years, etc.

of university high schools to employ graduate students on a part-time basis and to the fact that several of the university high schools are less than 10 years old.

Since the number of teachers without previous experience is so small as compared with the number of new teachers, it seems probable that successful previous experience of prospective university high school teachers is considered important by most of the state universities. However, the large number of new teachers in the

university high school and the unusual nature of the objectives of such schools suggest the probable need of a well planned program for in-service training.

In addition to the qualifications implied in the discussion of this section, the nature of the work of the university high school teacher, who is usually a supervising or critic teacher, undoubtedly requires certain qualifications not necessarily essential for the public high school teacher. If a teacher is to guide a student-teacher in observation, participation and directed teaching, would it be too much to

TABLE XXII

NUMBER OF CLASSES TAUGHT DAILY BY TEACHERS IN UNIVERSITY HIGH SCHOOLS, PUBLIC HIGH SCHOOLS IN UNIVERSITY COMMUNITIES, AND HIGH SCHOOLS ACCREDITED BY THE NORTH CENTRAL ASSOCIATION*

Type of School	Per cent of Teachers Teaching			
	Less than four classes daily	Four classes daily	Five classes daily	Six or more classes daily
In university high schools.....	60.6	23.9	14.3	1.2
In public high schools of university communities	19.4	23.5	49.4	7.9
In secondary schools accredited by North Central Association ...	18.7	19.4	46.8	15.2

The table may be read as follows: 60.6 per cent of the university high school teachers teach less than four classes daily; 23.9 per cent, four classes daily; 14.3 per cent, five classes daily; and 1.2 per cent, six or more classes daily.

* The data in the first two lines of this table are based on reports of the various schools to their respective regional accrediting agencies for the school year 1929-1930, and the data in the third line are based on the 1930 quinquennial report of secondary schools approved by the North Central Association as reported in the North Central Association Quarterly, V (June, 1930), 100.

expect him to be familiar with the philosophy underlying modern teaching methods, educational activities, and principles of supervision? Certainly, some of the directed teaching programs seem to be built on that assumption. There are some who would have the critic teacher an aggressive individual, e.g., the dean of one institution who is now (1931) in the midst of the task of selecting a faculty for a new laboratory school emphasized his desire to have every teacher possessed with the attitude of a pioneer, while in another of the leading institutions the supervisor of directed teaching in speaking of an outstanding teacher pointed out that he was ever on the alert to improve present practices. In conference with the dean of one institution and the head of a university high school department in another, the point was stressed that one duty of the university high school teacher was to influence constructively the educational activities of the state within his particular field.

The Teaching Load.—In analyzing a school situation with respect to the teaching load, one usually considers the pupil-teacher ratio, the number of classes taught daily and the number of pupils taught daily. In dealing with a university high school situation, one must consider also the number of student teachers to be supervised and the number of scheduled teacher-student teacher conferences. Each of these factors will be discussed in the order named.

The pupil-teacher ratio varies widely in the university high schools, ranging from 6:1 in one school to 30:1 in another. The

TABLE XXIII

NUMBER OF PUPILS TAUGHT DAILY BY TEACHERS IN UNIVERSITY HIGH SCHOOLS, PUBLIC HIGH SCHOOLS IN UNIVERSITY COMMUNITIES, AND HIGH SCHOOLS ACCREDITED BY THE NORTH CENTRAL ASSOCIATION

Type of School	Percentage of Teachers Teaching			
	Less than 141 pupils daily	141-150 pupils daily	151-160 pupils daily	More than 160 pupils daily
In university high schools.....	97.0	1.5	0.7	0.7
In public schools of university communities	84.9	5.5	3.8	5.7
In secondary schools accredited by North Central Association	75.0	8.0	6.0	11.1

The data in this table are derived from the sources indicated in connection with Table XXII.

This table may be read as follows: 97.0 per cent of the university high school teachers teach less than 141 pupils daily; 1.5 per cent, 141 to 150; 0.7 per cent, 151 to 160; and 0.7 per cent teach more than 160 pupils daily.

pupil-teacher ratio for the median school is 13.5:1. When compared with the 18 public high schools in the same communities as 18 of the university high schools, we find the pupil-teacher ratio smaller for the university high schools, with only two exceptions. The range in the 18 public schools is from 18:1 to 29:1. The median school has a pupil-teacher ratio of 22:1.

Table XXII shows that university high school teachers as a group teach a smaller number of classes daily than teachers of public high schools of university communities, or the high schools accredited by the North Central Association. It is significant that 60.6 per cent of the university high school teachers teach less than four classes daily, while only 42.8 per cent of public high school teachers in university communities, and 38.0 per cent of all North Central Association accredited schools teach less than five classes daily.

With a low pupil-teacher ratio and with a relatively small number of classes, one would naturally expect that university high school

teachers would teach daily a relatively small number of pupils. Table XXIII shows this to be the case. Of the university high school teachers, 97 per cent teach less than 141 pupils daily as compared with 84.9 per cent for the public high schools in university communities, and 75 per cent in all North Central Association schools. The figures would be more significant if still smaller groups were considered.²¹

According to information submitted by 19 university high schools,²² the number of student teachers that may be assigned to a supervising or critic teacher during one semester ranges from 5 in one case to 30 in another.²³ The median number of student teachers that may be assigned to a supervising teacher in these schools is 10. The number of student teachers permitted in any one high school class for directed teaching ranges from 1 in six institutions to 5 in one institution; the median number for all institutions under consideration is two. By using the number of students reported enrolled for student teaching and the number of teachers reported doing supervised teaching during the year 1930-31, we find that the teacher-student teacher ratio ranges from 3 to 1 in one institution to 14 to 1 in another. The teacher-student teacher ratio for the median school is 8 to 1.

Of the 19 university high schools in which directed teaching is done, 18 made reports on the frequency of teacher-student teacher conferences. The nature of the replies were such as to make a tabulation of little value; however, it is evident that the frequency of such conferences in the various institutions ranges from one each day with each student in at least three institutions to one per week in at least six institutions. In a few cases, it appears that only group conferences are scheduled while the individual conferences are held when needed.

The most significant factor growing out of the study of the teaching load of university high school teachers is the great variation in the load of the teachers in the different institutions. This is true not only with respect to pupil-teacher ratio and the number of classes taught per day, but it is also the case with respect to the number of student teachers supervised and the frequency of conferences with student teachers. In two cases, we find a high pupil-teacher ratio

²¹ The groupings used in Table XXIII are those used in reporting to the North Central Association.

²² One university does not use the high school for directed teaching.

²³ This does not include two schools in which it was reported that there was no stated limit.

accompanied by a low teacher-student teacher ratio, but this tendency is not general. With these facts in mind, one may naturally inquire as to what is the desirable load for a supervising or critic teacher. Undoubtedly any answer to this question in so far as it involves routine duties would have to be conditioned by one or more of the following factors: the importance to be attached to the teacher-student teacher conference as a phase of the training program; the extent to which the teacher is to function as a model or demonstration teacher; the extent to which the teacher is expected to do independ-

TABLE XXIV
HIGHEST OFFICIAL RANK THAT MAY BE ATTAINED BY UNIVERSITY
HIGH SCHOOL TEACHERS

Rank or Title	Frequency
Teacher	6
Supervising teacher	2
Supervisor	1
Instructor	5
Full professor	5
No precedent	1
TOTAL	20

ent research in her field, or conduct investigations under expert direction; and whether or not the teacher is expected to do advanced study.

Rank, Pay and Tenure of Teaching Personnel.—It is quite evident that there is a sharp difference of opinion with respect to rank, pay and tenure of the laboratory or training school teachers. Learned, Bagley and others have pointed out with reference to normal school administration that the greater the recognition and the more attractive the rewards given to the expert whose class work is to be the model for the student to emulate, the more clearly will the school emphasize its function as an institution for preparing teachers.²⁴ Evenden in referring to this same problem says:

Not until the 'teaching specialist' in the training school is recognized as a specialist, is as well trained as other members of the staff, and as a result, receives the same salary as other members of the staff, shall we be able to make much progress in the development of professional education of teachers in this country.²⁵

²⁴ Learned, Bagley, and others, *Professional Preparation of Teachers for American Schools*. Bulletin No. 14 (1920), p. 214. New York: The Carnegie Foundation for the Advancement of Teaching.

²⁵ E. S. Evenden, "Cooperation of Teachers of Academic Subjects with the Training School," *Supervisors of Student Teaching*, Fifth Annual Session (1925), p. 10.

In connection with his study on the status and work of the training supervisor, Garrison expresses the belief that the training supervisor, upon attainment of suitable standards, should be given the privileges, ranking and pay that are enjoyed by the college staff.²⁶

Data from the 20 university high schools show that the hopes of the above writers are far from realization in so far as they apply to laboratory schools connected with state universities. Table XXIV shows the highest rank that may be attained by a university high school teacher according to data submitted by the 20 university high school principals.

According to data from the same source, the highest rank that may be attained by university high school department heads is shown in Table XXV. These data concerning the rank of both regular teachers and department heads indicate clearly a lack of uniformity of practice in the various state universities.

TABLE XXV
HIGHEST OFFICIAL RANK THAT MAY BE ATTAINED BY UNIVERSITY
HIGH SCHOOL DEPARTMENT HEADS

Rank or Title	Frequency
Teacher	1
Supervising teacher	1
Supervisor	1
Instructor	2
Assistant professor	1
Full professor	8
No precedent or ruling.....	3
No department head.....	3
TOTAL	20

Table XXVI shows that the median of the minimum salaries of the 20 university high schools is \$1,600; the median of the maximum salaries, \$3,060; the median of the average salaries for men, \$2,550; and the median of the average salaries for women, \$2,105. The same table shows that these figures are considerably in excess of those for the same items in connection with public high schools in university communities and North Central Association accredited schools. When the salaries of teachers of 18 university high schools are compared with the salaries of 18 public high schools in the same respective communities, school with school, only one university high school has a lower minimum salary than that of the public high school,

²⁶ Noble Lee Garrison, *Status and Work of the Training School Supervisor*. Teachers College Contributions to Education, No. 280 (1927), p. 92. New York: Columbia University.

four a lower maximum salary, four a lower average salary for men, and one a lower average salary for women. While the university high schools are far short of Mead's recommendation that all super-

TABLE XXVI

MEDIANS OF MINIMUM, MAXIMUM, AND AVERAGE SALARIES OF TEACHERS IN UNIVERSITY HIGH SCHOOLS COMPARED WITH SAME IN TWO OTHER GROUPS

Type of School	Minimum Salary	Maximum Salary	Average for Men	Average for Women
University high school	\$1600	\$3060	\$2550	\$2105
High school in university community	1300	2500	1943	1548
North Central Association school	1383	2277	1839	1609

The figures given in the first two lines of this table are based on data from the original reports of the schools involved to their respective regional accrediting agencies and those of the third line are taken from the consolidated 1930 quinquennial report of secondary schools approved by the North Central Association as reported in the North Central Association Quarterly, V, No. 1 (June, 1930), p. 100.

This table may be read as follows: for university high schools, the median of minimum salaries is \$1600; the median of maximum salaries, \$3060; the median of average salaries for men, \$2550; and the median of average salaries for women, \$2105.

vising teachers with the Master's degree and special preparation for their work be paid a minimum salary of \$3,000, it is evident that in most cases, the salary has been made more attractive than in public schools of their respective communities.²⁷

TABLE XXVII

TENURE OF UNIVERSITY HIGH SCHOOL PERSONNEL

Official	Frequency			
	Permanent Tenure	Indefinite Tenure	Elected Annually	Total
Supervisor of directed teaching.....	8	5	5	18*
Principal of high school	3	8	6	17*
Heads of high school departments....	4	5	8	17†
Supervising or critic teachers	2	7	11	20
Other teachers	1	2	9	12

This table may be read as follows: of the 20 university high schools connected with state universities, supervising or critic teachers have permanent tenure in two instances, indefinite in seven, and are elected annually in 11 of these institutions.

* Since there are 20 university high schools, the apparent discrepancy in figures is due to the fact that in eight institutions, the same individual is responsible for the administration of both high school and directed teaching activities. The figures have been tabulated as reported.

† Three institutions report no high school department heads.

The feeling of security in one's position is assumed to be a factor in the attractiveness of such a position. With this in mind, an effort was made to secure authentic information from principals of the state university high schools with respect to the tenure of

²⁷ A. R. Mead. *Supervised Student-Teaching*, p. 607. (Richmond: Johnson Publishing Company, 1930.)

the personnel of the university high school. While the supervisor of directed teaching may be more properly classed as a member of the college of education staff, information as to his tenure was also obtained as a basis of comparison. Table XXVII shows that, according to the data submitted, one's tenure is likely to be more secure as he moves up the scale from teacher, to critic teacher, to department head, to principal, and finally to supervisor of directed teaching. This is shown quite clearly in the column headed "Elected Annually." The same thing is shown in the column headed "Permanent Tenure" with the exception of principals, and this irregularity of the order is accounted for by the greater number of principals with indefinite tenure.

The figures of this table indicate that provisions for tenure of teaching personnel in university high schools are more favorable than in public schools; however, figures already presented show that the turn-over of teaching personnel is much greater than in public schools.²⁸ Data are not available to show the reason for this unexpected difference.

Selection and Election of Teachers.—An attempt was made to determine the party or parties responsible for the selection and election of university high school teachers. This seemed important because of the peculiar functions of the university high school and because of the indirect influence that might be exerted with respect to the exercise of these functions by the individual making the selections. In addition to this, the teacher will have more administrative relationships with a greater number of officials than would be the case in the public high school.

According to data submitted by university high school principals, the selection (not election) of teachers is made by officials as indicated in the following table.

It is evident from the data given above that the university high school principal and the director of teacher-training, or supervisor of directed teaching, are the important agents in the selection of teachers. It will be noticed that the principal either takes the initiative or has a part in the selection of teachers in 11 of the 20 institutions. In four of these institutions, however, the individual designated as principal is responsible for the administration of both high school and teacher-training activities. In 10 of the institutions, the director either takes the initiative or has a part in the selection of teachers; however, in three of these institutions, the individual

²⁸ See page 52 and Table XXI.

designated as director is responsible for the administration of both high school and teacher-training activities. It is probable that the dean of the education department has a greater part in the selection of teachers than the above data seem to indicate; the nature of his position places upon him the final responsibility for the selection of teachers, regardless of the machinery which he may set up for this purpose. The important point to be considered in this connection

TABLE XXVIII
OFFICIALS BY WHOM TEACHERS ARE SELECTED

Officials	Frequency
Principal	1
Principal recommends to dean of the education department.....	4
Principal and dean	2
Principal with advice and counsel of supervisor of directed teaching and dean	1
Dean	1
Director of high school	2
Director of teacher-training	1
Director of teacher-training recommends to dean	1
Director and dean.....	2
Principal and director recommend to dean	2
Principal, dean and professor of secondary education	1
Dean, director and one member of education faculty	1
Faculty of education department	1
TOTAL	20

is the probable influence exercised by the principals of the university high school and the director of teacher-training, or supervisor of directed teaching. In so far as indicated by the above data, each of these officials has about the same influence with respect to this function.

CLERICAL ASSISTANCE IN UNIVERSITY HIGH SCHOOLS

Since the nature of the functions claimed for the university high school would probably require more extensive record keeping, correspondence, etc., than would be necessary in the public high school, we might expect to find more liberal provision for clerical assistance in this type of school than in the public high school. Table XXIX shows this to be true when calculated on the basis of the number of pupils enrolled to each full-time clerk, with the exception of those schools which make no provision for clerical assistance. The surprising element is the absence of clerical assistance in four of the university high schools. Of the 11 university high schools reporting clerical assistance, the range is from 74 pupils to 381 pupils for each

clerk, when calculated on a full-time basis, with the median of 176 pupils per clerk. Of the 14 public high schools in the same communities reporting clerical assistance, the range is from 234 pupils to 1,328 for each full-time clerk with a median of 553 pupils per clerk.

When we consider the ratio of the number of student teachers to each clerk, a greater variation in practice is noticed than in the case of the number of high school pupils per clerk. For the 11 university high schools reporting clerical assistance, the range is from 40 student teachers per clerk in one case to 400 student teachers per clerk in another, with a median of 125.

TABLE XXIX

CLERICAL ASSISTANCE PROVIDED FOR UNIVERSITY HIGH SCHOOLS AND PUBLIC HIGH SCHOOLS IN UNIVERSITY COMMUNITIES

Pupil Clerk Ratio	Frequency with respect to	
	University High School	City High School
No report	5	5
No clerk provided	4	1
Less than 100 pupils per clerk	1	0
100 to 199 pupils per clerk	5	0
200 to 399 pupils per clerk	5	2
400 to 599 pupils per clerk	0	5
Over 600 pupils per clerk	0	7

The table may be read as follows: of the 20 university high schools reporting to their regional accrediting agencies, five made no report with respect to clerk, four make no provision for clerks, one provides a clerk for an enrollment of less than 100 pupils, five provide one clerk for enrollments of 100 to 199 pupils, and five provide one clerk for enrollments of 200 to 399 pupils.

The data of this table are taken from the 1929-1930 reports of these schools to the North Central Association and similar accrediting agencies.

It is generally accepted as an unwise practice in the administration of any activity for a specialist to utilize his time on routine matters at the expense of more important duties, or to fail to provide for the specialist such assistance as may be necessary for the realization of the objectives of his office. In view of the facts presented in this section, therefore, one may wonder if serious consideration should not be given to the matter of clerical assistance in connection with adequate records, administrative routine, official correspondence of the principal, department heads and teachers, and possibly other activities.

PUPIL PERSONNEL OF UNIVERSITY HIGH SCHOOLS

There are two factors that seem to be of primary concern when dealing with the matter of pupil personnel of campus laboratory

schools; namely, the type of pupils enrolled and the availability of pupils. It is our purpose here to throw some light upon the state university high school situation with respect to these two problems.

Types of Pupils.—The principals of the 20 university high schools under consideration were asked the following questions bearing on the nature of pupil enrollment: "What is the intelligence quotient of the average pupil in the university high school? If this information is not available, do you consider the pupils of the university high school a more select group than those in the neighboring high school?" Information was submitted by each principal in answer to one of these questions, and 11 of the principals answered both of these questions. The average intelligence quotient of pupils enrolled was obtained for 13 of the schools. These range from 94 in one situation to 118 in another, with a median of 105, or mean of 106. The intelligence quotient of the average pupil is above 110 in only three of the 13 schools. These figures do not suggest that the enrollments of these schools are highly selected, with the possible exception of two or three schools, when compared with the results of tests given in the New York rural school survey, which showed the median intelligence quotient of high school pupils to be 110.5.²⁹

It may be objected that such figures as submitted above have no significance in determining the selectiveness of the university high school group unless used in comparison with similar figures for the public high schools of the same respective communities. Figures are not available for the public high schools of the same communities; however, 18 of the university high school principals submitted their opinion on this point. Eight of these principals believe that the university high school group is a more select group than is the public high school enrollment of the same community, while 10 of them believe that the university high school enrollment is not more highly selected than that of the public high school.

In so far as these data are indices of the nature of university high school enrollments, there does not seem to be sufficient variation from the normal public school enrollment, in case of the average university high school, to cause a great deal of concern. That some of the university high schools have pupils superior to those of public schools, however, is evident. It is also quite probable that several of these schools have two distinct groups enrolled, one of which may constitute a rather select group. This is known to be true in

²⁹ M. E. Haggerty and Harry B. Nash, "Mental Capacity of Children and Parental Occupation," *Journal of Educational Psychology*, XV (December, 1924), 562.

at least three schools. The principal of one of these schools found that when the intelligence test scores of his pupils were plotted, instead of getting a normal curve, he got a curve with two distinct modes. This was due to the fact that the pupils from the city had a tendency to be superior pupils, while those from the county were below the average for the city school. The tuition fees of the county pupils in this case were paid by their districts, while the city pupils paid their own tuition fees. Since the county pupils paid their own tuition if they entered the university high school before the ninth grade, most of the county pupils were found in Grades IX to XII. The influence of this rural group in the upper four grades is shown by the fact that the average intelligence quotient of the junior

TABLE XXX

PERCENTAGE OF HIGH SCHOOL ENROLLMENT IN VARIOUS OCCUPATIONAL GROUPS

Occupation	University High School	New York Rural High School*	Omaha High School†
Professional	43.9	14.0	16.4
Business and clerical	19.9	26.1	44.5
Skilled	7.9	18.6	26.5
Farmer	20.2	34.1	0.0
Other classifications	8.2	7.3	12.6

The first column of this table shows the percentage of the total enrollment of a particular university high school found in the occupational groups indicated at the left; the second column shows the same for New York rural high schools, and the third column the same for the high schools of Omaha. For example, the first row shows that 43.9 per cent of the university high school enrollment, 14.0 per cent of the New York rural high school enrollment, and 16.4 per cent of the Omaha high school enrollment fall in the professional group, according to their fathers' occupations.

* These figures were derived from the data reported by M. E. Haggerty and Harry B. Nash in "Mental Capacity of Children and Parental Occupation," *Journal of Educational Psychology*, XV (December, 1924), 570.

† I. N. Madsen, "The Contribution of Intelligence Tests to Educational Guidance," *The School Review*, XXX (November, 1922), 692.

high school pupils is 107 while that of the senior high school is 101.

A brief analysis of the type of pupils enrolled in another university high school, which has a more select enrollment, brings out more clearly this tendency toward one select group and another of average or less than average ability. The school in question had an enrollment (1930-31) of 317. Of these, 72.8 per cent were city pupils and 27.2 per cent rural. The median intelligence quotient for the entire group was 115.8; for the city group, 120.2; and for the rural group, 103.8. Table XXX shows the selectiveness of this group in terms of parental occupation as compared with the pupils of schools involved in two other studies.³⁰ It is highly significant that 43.9 per cent of the university high school pupils fall in the professional group, while only 14.0 per cent and 16.4 per cent, re-

³⁰ For references, see footnotes, Table XXX.

spectively, of the pupils of the other two studies fall in this classification. It is also significant that 62.6 per cent of the professional group, or 24.3 per cent of the entire enrollment of this university high school are from homes of professors. Thus it appears that a school of this type, though it may seem to be approximately a normal group when judged by the intelligence quotient of the average pupil, may have within its enrollment a highly selected group.

Availability of Pupils.—Pupils are not always available in sufficient number for the most satisfactory operation of a university high school, or for carrying on to best advantage of other related activities. In at least two instances, boarding pupils are solicited in an effort to obtain a sufficiently large enrollment. Information submitted by principals of the 20 university high schools indicates that 25.0 per cent of these schools have difficulty obtaining a sufficient enrollment. On the other hand, 35.0 per cent are fortunate enough to have a waiting list. A study of the situation makes evident the fact that the factor of availability of pupils may not be neglected when making plans for a laboratory school.

THE STATUS OF PROGRAMS OF STUDIES OF UNIVERSITY HIGH SCHOOLS

There is very little published information with respect to the curricula of laboratory schools. Mead indicates that there is less information concerning this phase of laboratory school work than any other.³¹ This condition seems to justify a rather careful analysis of such data as may be available.

Sources of Data.—The 1929-1930 reports of the 20 university high schools to their respective regional accrediting agencies were obtained. Most of these reports contained rather full information concerning the subjects offered and the number of pupils enrolled in each subject. Where information was lacking in these reports, it was supplemented at the request of the writer by the principal of the school concerned. An attempt was made to secure similar data for a representative public high school in each of the university communities. Complete data was obtained for 18 public high schools located in as many university communities.

Scope.—A curricular study could very well include an investigation of every activity in the school which contributes to the education of the pupils. It might include homeroom activities, social ac-

³¹ A. R. Mead, *Supervised Student-Teaching*, p. 557. (Richmond: Johnson Publishing Company, 1930.)

tivities, so-called extra-curricular activities, etc. This section, however, will be devoted, for the most part, to the program of studies as the term is generally understood.

In reviewing this material, it should be kept in mind that the figures have to do with the upper four grades of the university high schools and the public schools used for comparison. Reports on the subjects offered and the enrollment in the subjects were made by the various schools to their accrediting agencies for the upper four grades only. Data are not available, therefore, for the lower junior high school grades.

Specific Purposes of This Analysis.—The purposes for the analysis of the available data concerning university high schools are as follows:

a. To determine the subjects offered in the university high schools and the popularity of the subjects as indicated by subject enrollments.

b. To make an analysis of this offering in light of practices of public high schools in university communities, and in light of similar studies of a more general nature that have been made with respect to public high school courses of study.

c. To determine to what extent the programs of studies of the university high schools are influenced by: (1) size of the school, (2) function of the school, and (3) other possible factors.

d. To derive from the data a typical university high school program of studies.

e. To determine the freedom which university high schools may exercise in curriculum development.

The analysis of available data with these purposes in mind will be attempted under the following captions: (a) subject offerings; (b) enrollments in courses offered; (c) variation according to size of schools; (d) university and public high schools compared; (e) typical programs of studies; and (f) opportunity for curriculum development.

Subject Offerings.—It will be observed from Table XXXI that each of the university high schools offer mathematics ranging in amount from two to five units with exactly half of the schools offering three units.

English is offered in each year in each school. The fact that three schools offer only three years of English is due to the three year organization. It will be noted that more than four units of English is offered in seven schools. This is due to subjects such as

public speaking, journalism, and so on. Table XXXIV³² brings this out more clearly.

With reference to foreign languages, it is significant that four years of Latin are offered in only four schools, that two years are offered in six schools, and that three of the schools offer no Latin. French seems to be by far the most popular of the modern languages, being offered by 18 of the schools, while only four offer Spanish,

TABLE XXXI
SUBJECT OFFERINGS IN TWENTY UNIVERSITY HIGH SCHOOLS
Number of Schools Offering Various Numbers of Units

Subject Groups	¼	½	1	1½	2	2½	3	3½	4	4½	5	5½
Mathematics					1	2	10	1	4		2	
English							3		10	3	4	
Latin					6		7		4			
French			2		9		3		4			
Spanish			2		2							
German			1		1				1			
Norse			1									
Social Studies ..						3	5		7		5	
Science					3		7	1	8		1	
Commercial		1	4		2	1	2		4		1	1
Industrial Arts ..			4	1	2	1	3					
Household Arts .			7		8		1		1			
Agriculture		1	3									
Music		6	3	2	4							
Art	1	2	6		5	1						

This table shows the number of units offered by each of 20 university high schools. The numerals in the body of the table represent the number of schools offering a certain number of units of a particular subject. The numerals at the head of the table represent the number of units offered by the respective schools. For example, six schools offer two units of Latin, seven schools offer three units of Latin, and four schools offer four units of Latin.

and three offer German. The appearance of Norse is due, apparently, to local needs. It appears from Table XXXI that several schools are offering only one unit of modern language. It is possible that only one class in a particular language is given each year,³³ i.e., first year of the language one year and the second year of it the next.

Social studies are offered by every school in amounts varying from 2½ units to 5 units, with 12 of the schools offering 4 or 5 units.

³² While Table XXXIV was constructed for the purpose of showing the subject offering in the university high school according to size, frequent reference to this table will aid in getting an adequate understanding of this part of the study.

³³ The North Central Association quinquennial reports (1929-1930) used in this study give enrollments in each subject. This does not always mean that where there is no enrollment the course is not offered. Some subjects may be offered in alternate years.

The offering in commercial work varies widely. Four of the schools offer no commercial work. Of 16 schools offering commercial work, the amount offered is well scattered from $\frac{1}{2}$ unit to $5\frac{1}{2}$ units.

Eleven schools offer industrial arts varying in amounts from 1 to 3 units. Household arts is offered by 17 schools with credit value ranging from 1 to 4 units. However, all but 2 of these 17

TABLE XXXII

SUBJECT OFFERINGS IN EIGHTEEN PUBLIC HIGH SCHOOLS LOCATED IN THE SAME COMMUNITIES AS THE UNIVERSITY HIGH SCHOOLS

Subject Groups	Number of Schools Offering Various Numbers of Units														
	½	1	1½	2	2½	3	3½	4	4½	5	5½	6	6½	7	
Mathematics				2	2	2	4	6		1	1				
English						1	1	7	3	1	1	3		1	
Latin		1		3		6		8							
French				8		5		2							
Spanish				5		1									
German		2		3		1		1							
Norse		1		1											
Swedish				1											
Social Studies						3		5		6	4	1			
Science				2		4		7	2	3					
Commercial				1		1	1	5	1	2	1	2	2	2	
Industrial arts		2		3		6		4							
Household arts				6		2	3	2	1						
Agriculture	2	2		4				1							
Music		7	4*	2		1		1							
Art		4		6		2		2							
Bible		2													

This table shows the number of units offered by each of 18 public high schools located in the same communities as the university high schools. The numerals in the body of the table represent the number of schools. The numerals at the head of the table represent the number of units offered by the respective schools. For example, five schools offer 2 units of Spanish and 1 school offers 3 units of the same subject.

* One of these offers $1\frac{1}{4}$ units in music.

schools offer only 1 or 2 units in this subject. Four schools offer agriculture, not more than 1 unit being offered by any school in this subject.

Music is offered in 15 schools and art in 15 schools. Credit for music varies from $\frac{1}{2}$ unit to 2 units, and credit for art, from $\frac{1}{4}$ unit to $2\frac{1}{2}$ units.

Table XXXII shows the subject offering of 18 public high schools located in the same communities as 18 of the university high schools. There are certain noticeable differences in the offerings of the university high school and the public high school. A greater number of English courses is offered in the public high schools. Table

XXXIV reveals this fact more clearly. Latin is offered by all of the public high schools, 50 per cent offering as much as 4 units. German is offered by more of the public high schools. Commercial subjects, industrial arts, home economics and agriculture are offered more extensively in the public high schools. One can only suggest

TABLE XXXIII

ENROLLMENTS IN COURSES OFFERED BY UNIVERSITY HIGH SCHOOLS COMPARED WITH ENROLLMENTS IN THE SAME COURSES IN OTHER SCHOOLS EXPRESSED IN EACH CASE AS THE PER CENT THAT THE COURSE ENROLLMENT IS OF THE SCHOOL ENROLLMENT

Courses Offered	University High School	City High School	North Central Association	Southern Association
Mathematics	72.6	56.6	54.9	71.9
English	97.9	101.9	97.6	83.9
Latin	28.2	20.3	21.9	27.2
Greek	0.0	0.0	0.1	0.1
French	27.2	13.0	9.4	12.3
Spanish	2.4	5.1	7.9	16.0
German	3.1	4.1	2.5	0.2
Social studies	77.2	78.3	69.3	64.0
Sciences	57.1	43.3	49.0	40.5
Commercial work	23.6	44.8	56.0	27.2
Manual training	11.3	13.7	16.2	5.1
Household arts	14.3	13.2	13.4	13.2
Agriculture	2.1	2.4	3.0	1.7
Music	30.5	30.5	38.3	17.7
Art	10.8	6.7	7.0	2.3

Table XXXIII shows the relation of the enrollment in particular courses in the university high school to the total school enrollment. This relationship is shown in the first column; for example, the enrollment in mathematics is 72.6 per cent of the total enrollment. Column two shows the same for city public schools located in the same communities as the university high schools. The third column shows the same for the high schools of the North Central Association as revealed in the 1930 report. The fourth column shows the same relationship between the course enrollment and school enrollment for the high schools of the Southern Association of Accredited Schools and Colleges according to 1926-27 statistics reported by Roemer in Bureau of Education Bulletin (1928), No. 16.

the reasons for the differences in the offerings of the two types of schools. It is possible that the interests and needs of the public school group are more varied because of the greater heterogeneity of this group. Then, too, the public schools considered in this study have much larger enrollments than the university schools. The enrollments of the university high schools (i.e., the upper four grades) range from 46 to 295, while the enrollments of the public high schools range from 285 to 2,174. The smaller enrollments are less favorable to an extensive offering because of prohibitive expense. It is possible, too, that the academic influence of the university plays a part in shaping the program of the university high school.

Enrollments in Courses Offered.—If we are to understand the

importance of the various subjects in the program of studies in the university high schools, it is not sufficient to know what is offered; we must know also to what extent the pupils are enrolled in these subjects. Table XXXIII was constructed for the purpose of showing the relative importance of the various subjects in terms of pupil enrollment. It seemed that this could best be done by expressing subject enrollments as a percentage of the school enrollments. It occurred to the writer that figures for the university high schools would have little significance without some definite basis for comparison. With that in mind, tabulations have been made of subject enrollments for 18 public high schools located in the same communities as 18 of the university high schools. In order to determine to what extent the public high schools are typical, comparisons are made with figures from the 1930 North Central Association report and Roemer's study of a similar nature in the Southern Association.³⁴ It is evident from these figures that the subject enrollments in the 18 city public high schools are typical of the subject enrollments of the high schools of the North Central Association.

When the university high schools are compared with the public high schools, it is noticeable that the former have relatively larger enrollments in mathematics, Latin, French, and science, and relatively smaller enrollments in commercial subjects. In other words, enrollments in typical college preparatory subjects are greater in university high schools than in the public high schools. There is a striking similarity in the subject enrollments in the university high schools and the subject enrollments in the Southern Association schools, where the college preparatory function is still very strong.

Variation According to Size of School.—One of the purposes of this study is to determine the influence of the size of the university high school on the program of studies in actual practice. The first three columns of Table XXXIV give us a detailed picture of the situation. For the purpose of this analysis, it was necessary to group the schools according to size. The 20 university high schools fall naturally into three groups as follows: one group embraces five schools with enrollments varying from 46 to 88; a second group has eight schools with enrollments from 108 to 171; and the third group consists of seven schools with enrollments ranging from 175 to 295. These groups are represented in the first three columns of Table

³⁴ *The North Central Association Quarterly*, V (June, 1930), 103-5; and Joseph Roemer, *Secondary Schools of the Southern Association*. Bulletin, No. 16 (1928), pp. 55-56. Washington: United States Bureau of Education.

XXXIV. The table shows in detail the percentage of schools in each group offering the various courses in each of the subject matter fields.

TABLE XXXIV

OFFERING OF UNIVERSITY HIGH SCHOOLS ACCORDING TO SIZE AND IN COMPARISON WITH PUBLIC HIGH SCHOOLS IN SAME COMMUNITIES*

Subjects	Percentage of University High Schools with Enrollments†			Percentage of City High Schools with Enrollments†	
	46 to 88	108 to 171	175 to 295	285 to 436	664 to 2174
English					
First year	100.0	100.0	100.0	100.0	100.0
Second year	100.0	100.0	100.0	100.0	100.0
Third year	100.0	100.0	100.0	100.0	100.0
Fourth year	100.0	100.0	100.0	100.0	100.0
Public speaking	20.0	12.5	42.9	50.0	80.0
Debating	0.0	0.0	0.0	12.5	0.0
Journalism	0.0	0.0	0.0	12.5	10.0
Dramatics	0.0	12.5	0.0	12.5	30.0
Senior grammar	12.5	0.0	0.0	0.0	10.0
Latin					
First year	60.0	87.5	85.7	100.0	100.0
Second year	60.0	100.0	85.7	100.0	100.0
Third year	0.0	75.0	71.5	37.5	81.8
Fourth year	0.0	12.5	57.2	37.5	45.4
French					
First year	40.0	100.0	87.5	37.5	100.0
Second year	80.0	100.0	87.5	37.5	100.0
Third year	20.0	37.5	28.6	12.5	60.0
Fourth year	0.0	0.0	42.9	0.0	20.0
Spanish					
First year	40.0	12.5	0.0	25.0	40.0
Second year	20.0	12.5	0.0	25.0	40.0
Third year	0.0	0.0	0.0	12.5	0.0
German					
First year	0.0	12.5	28.6	12.5	60.0
Second year	0.0	0.0	28.6	0.0	50.0
Third year	0.0	0.0	14.3	0.0	20.0
Fourth year	0.0	0.0	14.3	0.0	10.0
Norse	20.0	0.0	0.0	0.0	20.0
Swedish	0.0	0.0	0.0	0.0	10.0
Mathematics					
General mathematics	20.0	0.0	42.9	0.0	30.0
First year algebra	60.0	75.0	71.5	87.5	90.0
Second year algebra	80.0	100.0	100.0	87.5	100.0

* This table shows the percentage of schools of each of the three university high school groups and of each of the city public high school groups offering the various subjects. For example, first year Latin is offered by 60 per cent of the university high schools with enrollments between 46 and 88, 87.5 per cent of university high schools with enrollments between 108 and 171, 85.7 per cent of university high schools with enrollments between 176 and 295, 100 per cent of the city public high schools of the same communities as the university high schools with enrollments between 265 and 436, and 100 per cent of the city high schools with enrollment between 664 and 2174.

† There is no university high school with enrollment between 88 and 108, or between 171 and 175, and none of the public high schools under consideration with enrollments between 436 and 664.

TABLE XXXIV (Continued)

Subjects	Percentage of University High Schools with Enrollments			Percentage of City High Schools with Enrollments	
	46 to 88	108 to 171	175 to 295	285 to 436	664 to 2174
Plane geometry	100.0	100.0	100.0	100.0	100.0
Solid geometry	20.0	87.5	42.9	62.5	90.0
Trigonometry	20.0	12.5	71.5	25.0	60.0
Arithmetic for academic credit	0.0	0.0	14.3	37.5	10.0
Unified mathematics	0.0	12.5	0.0	0.0	0.0
Science					
General Science	80.0	75.0	85.7	75.0	50.0
Biology	100.0	100.0	100.0	75.0	80.0
Botany	0.0	0.0	0.0	12.5	40.0
Zoology	0.0	0.0	0.0	12.5	10.0
Chemistry	60.0	75.0	100.0	37.5	90.0
Physics	40.0	100.0	71.5	87.5	100.0
Physical Geography	20.0	0.0	14.3	37.5	20.0
Physiology	0.0	12.5	0.0	50.0	20.0
Social studies					
Community civics	40.0	25.0	57.2	37.5	50.0
Ancient history	20.0	12.5	42.9	37.5	50.0
Early European history....	40.0	0.0	0.0	12.5	10.0
World history	60.0	62.5	57.2	62.5	30.0
American history	100.0	100.0	100.0	100.0	100.0
Modern history	0.0	12.5	42.9	0.0	30.0
Modern and medieval history	40.0	12.5	14.3	50.0	70.0
English history	0.0	0.0	0.0	12.5	20.0
Government or ad- vanced civics	20.0	25.0	28.6	62.5	60.0
American problems	60.0	25.0	71.5	12.5	10.0
Economics	0.0	50.0	14.3	50.0	80.0
Sociology	0.0	37.5	0.0	37.5	40.0
Social Science	0.0	0.0	28.6	0.0	0.0
Ethics	0.0	12.5	0.0	0.0	10.0
Occupation	0.0	0.0	0.0	12.5	10.0
Psychology	0.0	0.0	0.0	12.5	30.0
Commercial work					
First year typing	80.0	75.0	57.2	87.5	100.0
Second year typing	20.0	37.5	14.3	62.5	90.0
First year stenography....	40.0	37.5	28.6	87.5	100.0
Second year stenography..	20.0	12.5	0.0	75.0	80.0
Bookkeeping I	40.0	37.5	42.9	87.5	100.0
Bookkeeping II	0.0	0.0	0.0	25.0	60.0
Office practice	0.0	37.5	0.0	12.5	40.0
Commercial law	0.0	12.5	14.3	12.5	20.0
Commercial geography ...	40.0	0.0	0.0	25.0	40.0
Commercial arithmetic	20.0	0.0	0.0	12.5	70.0
Other commercial subjects.	0.0	0.0	14.3	12.5	60.0
Agriculture					
First year	0.0	25.0	14.3	37.5	50.0
Second year	0.0	0.0	0.0	12.5	30.0

TABLE XXXIV (*Continued*)

Subjects	Percentage of University High Schools with Enrollments			Percentage of City High Schools with Enrollments	
	46 to 88	108 to 171	175 to 295	285 to 436	664 to 2174
Third year	0.0	0.0	14.3	0.0	0.0
Manual training					
First year	40.0	37.5	85.7	62.5	100.0
Second year	40.0	37.5	57.2	50.0	100.0
Third year	20.0	12.5	42.9	12.5	60.0
Fourth year	0.0	12.5	14.3	0.0	40.0
Household Arts					
First year	60.0	100.0	71.5	62.5	100.0
Second year	0.0	62.5	57.2	62.5	100.0
Third year	0.0	12.5	28.6	0.0	60.0
Fourth year	0.0	0.0	0.0	0.0	50.0
Art					
First year	20.0	75.0	100.0	50.0	90.0
Second year	20.0	50.0	57.2	12.5	90.0
Third year	0.0	0.0	14.3	0.0	30.0
Fourth year	0.0	0.0	14.3	0.0	20.0
Music					
Appreciation	0.0	25.0	28.6	12.5	0.0
Chorus	60.0	62.5	28.6	37.5	60.0
Orchestra	20.0	62.5	42.9	62.5	90.0
Band	0.0	12.5	0.0	37.5	90.0
Glee Club	20.0	25.0	42.9	62.5	80.0
Bible	0.0	0.0	0.0	12.5	10.0

In reviewing Table XXXIV, the following observations may be made:

1. The amount of Latin offered increases with the size of the school.

2. Modern foreign languages are offered in greater quantities in the larger than in the smaller schools.

3. General mathematics, solid geometry and trigonometry are more likely to be offered in the larger schools.

4. While general science and biology seem to be popular in every size school, one is more likely to find chemistry and physics in schools with enrollments above 100.

5. More work in agriculture, manual training and household arts is offered in the larger than in the smaller schools.

6. The larger school offers more opportunities in art and music than the smaller school.

7. There is a greater similarity in the group of largest schools and the group of middle size schools with respect to offerings than there is between the group of smallest schools and the group of

middle size schools. This seems to indicate that the university high school with an enrollment of less than 100 is considerably handicapped in the extent of its offering.

University and Public High Schools Compared.—The third and fourth columns of Table XXXIV enable us to make a comparison of the offering in the university high schools with that of the public high schools. In order that comparison might be made with the medium size public high school as well as the large high school, the 18 public high schools used in this study were divided into two groups as follows: the first group contains eight schools with enrollments ranging from 285 to 436, with a median enrollment of 341; the second group contains 10 schools with enrollments ranging from 664 to 2,174, with a median enrollment of 802. Unfortunately, we do not have a group of small public high schools. It will be noted that the schools in the group of largest university high schools are much smaller than the schools in the group of smaller public high schools. This fact should be kept in mind when making comparisons.

In English, there seems to be a tendency for the public schools to make more extensive offerings involving such courses as public speaking, debating, journalism and dramatics.

Latin is offered by 100 per cent of the public high schools in the first two years, while approximately 85 per cent and 87 per cent of the largest and next largest groups of the university high schools offer Latin. There seems to be little difference in the amount of Latin offered for the third and fourth years in the two groups of largest university high schools and the public schools. The Latin offering in the group of small university high schools is comparatively small in the first two years, with no Latin in the third and fourth years.

French seems to be more popular in the university high school. The French offering in the university high schools with enrollments less than 100 compares favorably with that of the public high school with enrollment of 285 to 436. With respect to this subject, the two groups of largest university high schools compare favorably with the larger public high schools. The offering in Spanish seems to be quite irregular in the university high school, and much more popular in the public high school. German seems to be confined largely to the group of large schools for each type, with a greater offering in the public high schools. Norse and Swedish are evidently determined by local needs.

TABLE XXXV

TYPICAL OFFERINGS OF UNIVERSITY HIGH SCHOOLS WHEN CONSIDERED IN ONE GROUP AND IN GROUPS ACCORDING TO SIZE*

Enrollment 46 to 88	Enrollment 108 to 171	Enrollment 175 to 295	All Schools
English First year Second year Third year Fourth year	English First year Second year Third year Fourth year	English First year Second year Third year Fourth year	English First year Second year Third year Fourth year
Latin First year Second year	Latin First year Second year Third year	Latin First year Second year Third year Fourth year	Latin First year Second year Third year
French First year Second year	French First year Second year	French First year Second year	French First year Second year
Mathematics Algebra I Algebra II Plane Geometry	Mathematics Algebra I Algebra II Plane Geometry Solid Geometry	Mathematics Algebra I Algebra II Plane Geometry Trigonometry	Mathematics Algebra I Algebra II Plane Geometry Solid Geometry
Science General Science Biology	Science General Science Biology Chemistry Physics	Science General Science Biology Chemistry Physics	Science General Science Biology Chemistry Physics
Social Studies American History	Social Studies American History World History Economics	Social Studies American History World History American Problems Community Civics	Social Studies American History World History American Problems
Typewriting First year	Typewriting First year	Typewriting First year	Typewriting First year
Manual Training	Manual Training	Manual Training First year Second year	Manual Training First year
Household Arts	Household Arts First year Second year	Household Arts First year Second year	Household Arts First year Second year
Art	Art First year Second year	Art First year Second year	Art First year
Music	Music Chorus Orchestra	Music	Music Chorus

This table shows those subjects offered by 50 per cent or more of the 20 university high schools considered in this study. The first, second and third columns show the typical offering for each group of schools while the last column shows the typical offering for all schools combined into one group. For example, Latin is offered in 50 per cent or more of the small schools in the first and second year; it is offered in each of the first three years in 50 per cent or more of that group of schools with enrollments of 108 to 171; it is offered in each of the four years in 50 per cent or more of the schools included in the group with enrollments of 175 to 295; when all of the schools are combined into one group, we find that Latin is offered in the first three years of 50 per cent or more of the schools.

* "Typical Offering" as used here is defined to mean the offering of 50 per cent or more of the group of schools concerned.

There seem to be no outstanding differences as to the amount and kind of mathematics offered in the university high schools and the public high schools, except that fewer of the small university high schools offer solid geometry and trigonometry.

In the case of science, the data seem to indicate that general science, biology and chemistry receive more emphasis in the university high schools than in the public high schools, while botany, zoology, physical geography and physiology have a more important place in the public high schools.

There are several differences in the field of social science that are worthy of note. World history seems to be more popular in the university high schools than in the public high schools. Only 30 per cent of the larger public high schools offer world history. Modern history seems to be offered in about the same amount as medieval and modern history in the university high schools, while the latter is far more popular in the public high schools. English history is not found in the university high schools, but several of the public high schools offer it. Government or advanced civics, economics, sociology, occupations and psychology, as separate subjects, receive more emphasis in the public high schools, while American problems has a more important place in the university high schools.

One of the most noticeable differences in the offerings of the university high schools and the public high schools is that the public high schools have a much more extensive program in commercial subjects. The same tendency is evident in the case of agriculture, manual training and household arts.

It is difficult to draw conclusions from the data with respect to art. In the case of music, appreciation seems to be more popular in the university high schools, while orchestra, band and glee club seem to be more popular in the public high schools.

*The Typical Programs of Studies.*³⁵—After this detailed analysis, it will be a relief to have presented in outline form the typical offering of university schools. Table XXXV has been constructed for that purpose. Only those subjects are listed which are offered by 50 per cent or more of the schools. The first, second and third columns give the typical offerings of the schools grouped according to size. The last column gives the typical offering for all schools. In so far as 50 per cent or more is typical, Table XXXV gives the program

³⁵ "Typical offering" as used in this section should be understood to mean the offering of 50 per cent or more of the group of schools concerned, e.g., a subject is typical if offered by 50 per cent or more of the schools.

TABLE XXXVI

TYPICAL OFFERINGS OF EIGHTEEN CITY PUBLIC HIGH SCHOOLS LOCATED IN THE SAME COMMUNITIES AS THE UNIVERSITY HIGH SCHOOLS*

Enrollment 285 to 436	Enrollment 664 to 2174	All Schools
English First year Second year Third year Fourth year Public speaking	English First year Second year Third year Fourth year Public speaking	English First year Second year Third year Fourth year Public speaking
Latin First year Second year	Latin First year Second year Third year	Latin First year Second year Third year
French	French First year Second year Third year	French First year Second year
German	German First year Second year	German
Mathematics Algebra I Algebra II Plane geometry Solid geometry	Mathematics Algebra I Algebra II Plane geometry Solid geometry Trigonometry	Mathematics Algebra I Algebra II Plane geometry Solid geometry
Science General science Biology Physics Physiology	Science General science Biology Physics Chemistry	Science General science Biology Physics Chemistry
Social Studies World History American History Mediaeval and Modern History Government or Advanced Civics Economics	Social Studies Community Civics Ancient History American History Mediaeval and Modern History Government or Advanced Civics Economics	Social Studies American History Mediaeval and Modern History Government or Advanced Civics Economics
Commercial Work Typewriting I Typewriting II Stenography I Stenography II Bookkeeping I	Commercial Work Typewriting I Typewriting II Stenography I Stenography II Bookkeeping I Bookkeeping II Commercial Arithmetic	Commercial Work Typewriting I Typewriting II Stenography I Stenography II Bookkeeping I
Agriculture	Agriculture First year	Agriculture

This table shows those subjects offered by 50 per cent or more of the eighteen public high schools considered in this study. The first and second columns show the typical offering according to the size of the schools, while the last column shows the typical offering for the entire group of eighteen schools. For example, French is not offered by 50 per cent of the schools in the smaller group; it is offered in the first, second and third years of 50 per cent or more of the group of larger schools; when all the schools are combined, 50 per cent or more of the schools offer French in the first and second year as indicated in the third column.

* "Typical Offering" as used here should be understood to mean that which is offered in 50 per cent or more of the schools of the group concerned.

TABLE XXXVI (*Continued*)

Manual Training First year Second year	Manual Training First year Second year Third year	Manual Training First year Second year
Household Arts First year Second year	Household Arts First year Second year Third year Fourth year	Household Arts First year Second year
Art First year	Art First year Second year	Art First year Second year
Music Orchestra Glee Club	Music Chorus Orchestra Band Glee Club	Music Chorus Orchestra Band Glee Club

of studies of the typical small, medium size, and large university high schools as well as the typical program of studies for all university high schools when considered as a single group. The table is self explanatory; however, it is worth noting that the program is considerably influenced by the size of the schools. The table also brings out rather strikingly the fact that the program of studies of the smaller university high school is almost entirely college preparatory in nature.

Table XXXVI was constructed for the sake of further comparison with public high schools. The most significant facts revealed by this comparison are: (1) that the typical offering in the university high school, though the school is small, is almost exactly the same in the college preparatory subjects (English, Latin, French, mathematics, and science) as the typical offering in the public high school which has an enrollment several times larger; (2) that the typical offering of the practical subjects (commercial, agriculture, manual training, and household arts) is much more extensive in the public high school than in the university high school.

At this point, one might well ask if there is a tendency for a university high school to offer a broader program than a public high school of the same size. Since the public high schools used in this study are larger than the university high schools, the best we can do is to compare the offering of the group of smaller public high schools (enrollment, 285 to 436) with that of the group of the largest university high schools (enrollment, 175 to 295). Here we see the university high school has two years more of Latin. The

university high school offers two years of French whereas the public high school offers no modern languages. There seems to be little difference as to the extent of the offering in mathematics, science, and social studies. The public school has a more extensive offering in commercial subjects. Only one year of typewriting is common in the university high school whereas we find in the public high school two years of typewriting, two years of stenography, and one year of bookkeeping. Two years of manual training and household arts are offered in both university high schools and public high schools. Art seems to have more emphasis in the university high school and music seems to have a more important place in the public high school. These facts seem to indicate that university high schools with enrollments of 175 to 295 have fully as extensive a program of studies as the public high schools with enrollment of 285 to 436. From this we might assume that a university high school would have a broader program than a public high school of the same size.

Opportunities for Curriculum Development.—One of the functions of the university high school is generally considered to be that of curriculum development. Information was obtained direct from the principals of the 20 university high schools with respect to freedom in the development of curricula and in the use of text books. This information revealed that 17 of these schools are not restricted by state adopted curricula, and 19 are not required to use state adopted texts. Though the program of studies of the university high school is necessarily restricted by the small enrollments, most of the schools are in a position to try out various methods, procedures and materials.

Conclusions.—With the purposes in mind which were set forth in the first part of this section, the following conclusions seem to be warranted in light of the facts which have been presented:

1. The subjects offered in the university high schools have a tendency to be of a college preparatory nature rather than of a practical nature.
2. The university high school has relatively large enrollments in such subjects as Latin, French, mathematics and science, and relatively small enrollments in the more practical subjects.
3. The extent and type of the offering of the university high school seems to be considerably influenced by the size of the school.
4. When compared with public high schools, the following conclusions seem to be justified:

a. The offering in the university high school seems to be broader than that of the public high school when size is considered.

b. There is more of the college preparatory type of courses in the university high school and more of the practical in the public high school.

c. Subject enrollments in the college preparatory type of subjects are relatively larger in the university high school than in the public high school, while the subject enrollments in the more practical subjects are relatively larger in the public high schools than in the university high schools.

5. We might expect the program of studies of a university high school to be influenced by the school's obligation to offer student teaching facilities in as many subjects as possible and by the obligation of the university high school to lead in the matter of curriculum development. It is highly probable that these two functions of the university high school have had influence since we find a more extensive offering in the university high school than in the public high school, when size is considered; and since there seems to be a more modern trend in the natural science and social science offerings in the university high school than in the public high school.

6. The typical university high school program of studies as revealed in Table XXXV shows that it leans decidedly to the college preparatory function and the complete absence of practical subjects in the very small school with the exception of typewriting.

7. As indicated by the last section of this discussion, most of the university high schools are free from state restrictions in matters of curriculum development and text book selection.

EFFICIENCY OF INSTRUCTION

In a previous section of this chapter, it has been shown that the teachers in university high schools are superior to public high school teachers with respect to academic and professional training.³⁶ It was also pointed out that more attractive salaries were paid university high school teachers than to public high school teachers.³⁷ Other things being equal, we should expect from these superior teachers more effective instruction than in schools with teachers not so well qualified. However, the pupils of the university high schools are usually taught by student teachers a portion of the time. With this in mind, an effort was made to determine the relative efficiency

³⁶ See page 50.

³⁷ See page 57.

of instruction in the 20 university high schools under consideration. Each of the principals was asked the following questions:

Has any attempt been made to determine the efficiency of instruction in your high school by means of standardized tests? What did the tests show as to the general efficiency of instruction?

Twelve of the principals answered the first question in the affirmative. The answers may be classified as in Table XXXVII. It was reported by one school that on the *Sones-Harry High School Achievement Test* the median for no subject taught in the university high school was below 75 percentile for the schools of the state as a whole, and that in some subject-matter fields, such as social science, the median for the university high school was as high as 90 percentile for the schools of the state. Of the eight schools reporting that no attempt had been made to determine the efficiency of instruction by means of standardized tests, two pointed out that such evidence as they had seemed to indicate superior results of instruction. None of the schools reported inferior instruction.

TABLE XXXVII
EFFICIENCY OF INSTRUCTION IN 12 UNIVERSITY HIGH SCHOOLS
AS DETERMINED BY STANDARDIZED TESTS

Classification	Frequency
Satisfactory	4
Superior or excellent	5
Very superior	3

Results of studies which have been published dealing with efficiency of instruction in connection with laboratory schools have had to do with elementary work to a large extent.³⁸ However, such studies along this line as have been published would lead us to the same conclusion as indicated by the reports of the principals of university high schools, that is, that pupils do not lose because of directed teaching and that in spite of directed teaching, the results of instruction in some schools seem to be distinctly superior.

STUDENT TEACHING AND RELATED PROBLEMS

The administration of laboratory schools, in most instances, cannot be separated from the administration of the student teaching program. Therefore, student teaching and related problems will be discussed under the following headings: (a) importance of student teaching; (b) purpose of student teaching; (c) extent of training;

³⁸ See references, Chapter III, pages 32-33.

(d) selection of prospective teachers; and (e) credit for student teaching.

Importance of Student Teaching.—In a recent study under the auspices of the Association of Colleges and Secondary Schools of the Southern States involving 838 accredited schools and 11,472 teachers, it was found that the majority of the teachers who had had professional training ranked practice teaching first in order of helpfulness of all the professional courses previously taken.³⁹ This was true not only of the group teaching for the first time, but also of the group who had been teaching from two to five years and the group who had been teaching six years or more. This attitude of teachers toward directed teaching is verified by a study made by Cahoon involving about 300 teachers who had recently graduated from the University of California (at Berkeley).⁴⁰ As long as such reports come from teachers in the field, it is probable that provision for student teaching will continue to be one of the principal functions of the university high school.

Purpose of Student Teaching.—Frazier points out that some of the most commonly accepted aims for student teaching at present are:

To enable the inexperienced to feel at home in the classroom; to give individual assistance to each teacher in personal problems of classroom management and instruction; to develop favorable emotional and intellectual attitudes toward teaching and education as a whole; to secure a degree of control over simple technique of instruction and pupil management; and to develop the capability of further growth.⁴¹

It is apparent, not only from literature, but also from the attitude of officials connected with teacher training work, that the purpose of student teaching is more than a device for insuring immediate success for the beginning teacher; in some quarters, there is a strong conviction that it is just as important that the prospective teacher develop an appreciation of the principles of correct practice as a basis of growth in teaching service. In line with this tendency is the obvious attempt to make application of psychological and educational theories to the actual practice of teaching and school management. This effort to integrate theory and practice is evident in recent manuals and mimeographed instructions used in connection

³⁹ M. E. Ligon and Others, *Training of High School Teachers*, p. 39. (Birmingham: Association of Colleges and Secondary Schools of the Southern States, 1931.)

⁴⁰ G. P. Cahoon, "What Training Do Beginning Teachers Need," *University High School Journal*, X (August, 1930), 320.

⁴¹ Benjamin F. Frazier, *Teacher Training 1926-1928*. Bulletin, No. 17 (1929), pp. 28-29. Washington: United States Bureau of Education.

with student teaching in some of the state universities. In some instances, at least, observation and participation, as well as student teaching, are directed in accordance with a well defined program previously worked out.

Extent of Training.—Questions naturally come up at this point as to the extent of the training to be provided through the laboratory school. Should the experience of the student teacher be limited to one subject, or subject-matter field? Should the student teacher observe and teach according to a single instructional pattern, such as the Dalton Plan? Should provision be made for observation of, or participation in, activities other than those connected with classroom teaching? Should provision be made for a period of internship, or responsible teaching, under typical public school conditions in addition to the usual course in directed teaching?

Although facilities for student teaching are quite limited at present, and though opinion in academic circles in most institutions would probably be against further extension of college credit for student teaching, there is evidence that prospective teachers could profit by teaching experience in a greater number of subjects. Ligon found that only 42.84 per cent of the teachers of high schools accredited by the Southern Association were teaching their major subjects only.⁴² A study by a graduate student of the University of Nebraska involving 402 North Central schools in Nebraska shows that over 70 per cent of the high school teachers in that state are teaching two subjects, and over 30 per cent are teaching three.⁴³ Peik's study shows the need for training in more than one field of specialization.⁴⁴ Charters reports that,

We have discovered that the inexperienced teacher in Ohio has little chance for employment, if he is trained to teach less than three subjects. If he is trained to teach only one, it is practically impossible for him to secure a position.⁴⁵

As a matter of practice, only two of the 20 institutions with university high schools require student teachers to do directed teaching in more than one subject; however, nine of them require observation in more than one subject. The teaching must be done in the

⁴² M. E. Ligon and Others, *op. cit.*, p. 8.

⁴³ Will French, "The Professional Training of Secondary School Teachers," *The North Central Quarterly*, III (December, 1928), 74.

⁴⁴ W. E. Peik, *The Professional Education of High School Teachers*, p. 151. (Minneapolis: The University of Minnesota Press, 1930.)

⁴⁵ W. W. Charters, "The Commonwealth Teacher-Training Study and the Curriculum," *Ninth Yearbook of the American Association of Teachers Colleges* (1930), p. 101.

major or minor subject in all but three of the institutions, and the exceptions are seldom made in these.

Closely related to this problem of wider experience with respect to the subject matter field is that of methods. In several of the institutions under consideration, it was observed in connection with this study that one instructional pattern was emphasized to the exclusion of all others. However, it was noted that in one institution a conscious effort was being made to familiarize the student teachers with the various methods with which they were likely to come in contact after leaving college. Regardless of the philosophy underlying either of these practices, it would seem that there is involved here a problem of considerable importance from a practical point of view.

Evidence is available from several sources with respect to the desirability of more adequate training of the student teacher in activities other than those connected with classroom teaching. In his follow-up study already mentioned, Cahoon found that most of the young teachers had duties to perform other than classroom teaching, such as supervision of home-room or advisory groups, advising clubs, coaching athletics, helping with dramatics, etc., and that "the need and desire for guidance or experience in these varied activities was frequently expressed and strongly evident."⁴⁶ Charters points out that since 75 per cent of Ohio graduates have at least one extra-curriculum activity in his teaching program, and since inability to conduct one of these activities is a deciding factor in the selection of inexperienced teachers, it is apparent that a student's course of study should include an extra-curriculum activity.⁴⁷ The attitude of presidents of teachers colleges on this subject was sought by Barr.⁴⁸ Of the 42 presidents who responded, 41 considered training for the direction of extra-curricular activities important. However, a further study showed that little systematic training seems to be provided for this type of activities.

There is sufficient interest at the present time in the matter of more extensive experience of the beginning teacher in responsible teaching under typical public school conditions to warrant consideration in connection with any discussion on the extent of training of prospective teachers. During *Schoolmen's Week* at the University of

⁴⁶ Cahoon, *op. cit.*, p. 157.

⁴⁷ Charters, *op. cit.*, p. 101.

⁴⁸ A. S. Barr, "The Training of Teachers for Direction of Extra-Curricular Activities," *Supervisors of Student Teaching*, Tenth Annual Session (1930), pp. 19-21.

Pennsylvania, March 18-21, 1931, three addresses were delivered in connection with the problem of internship following graduation.⁴⁹ At the *Annual Teacher Training Conference* held at the Indiana State Teachers College, Terre Haute, Indiana, April 10-11, 1931, a superintendent of county schools and a superintendent of city schools speaking on the topic, "What We Should Teach Prospective Teachers," advocated what amounts to a period of internship for prospective teachers.⁵⁰ Examples of such practice in modified form involving the educational programs of various types of political units or educational organizations are not lacking. For example, Germany⁵¹ has for many years required the prospective teacher to spend two years in a selected school before being licensed to teach; the state of Pennsylvania⁵² has for several years provided for a probation period of three years before permanent certificates are granted though no supervisory program is provided; the Buffalo⁵³ plan of teacher-training includes intensive training of teachers in "training centers" during their first year of work under actual public school conditions; the University of California has an apprentice plan for the training of vocational agricultural teachers (principally on the graduate level) which provides that each prospective teacher must spend an entire year as an assistant teacher.⁵⁴ Examples of other efforts to provide the beginning teacher with teaching experience under typical conditions could be cited.

Selection of Prospective Teachers.—Although there has been con-

⁴⁹ S. E. Weber, "Place of a Period of Internship Following Graduation;" H. E. Gress and A. F. Kemp, "The Mutual Responsibility of the Teacher-Training Institution and the Public School System for a Period of 'Internship' for Elementary School Teachers Following Graduation," *Schoolmen's Week Proceedings*. University of Pennsylvania Bulletin, XXXI, No. 36 (June 20, 1931), pp. 72-93.

⁵⁰ Donald Dushane, "What Should We Teach Prospective Teachers? (b) From the City Superintendent's Viewpoint," and W. Edward Fisher, "(c) From the County Superintendent's Viewpoint," *Teachers College Journal*, III (September, 1931), 92-100.

⁵¹ Thomas Alexander, "Practice-Teaching in Germany for Elementary and Secondary Teachers," *Educational Administration and Supervision*, XIII (May, 1927), p. 303.

⁵² H. W. Dodd, "The Mutual Responsibility of the Teacher Training Institution and Public School System for a Period of Internship," *Schoolmen's Week Proceedings*. University of Pennsylvania Bulletin, XXXI, No. 36 (June 20, 1931), p. 89.

⁵³ J. William Allen, "A Comparison of Teacher-Training Centers with Schools Having a Population of Like Ability," *Educational Administration and Supervision*, XV (March, 1929), 184-89.

⁵⁴ *Survey of Land-Grant Colleges and Universities*. Bulletin, No. 9 (1930), p. 267. Washington: United States Office of Education.

siderable interest within recent years in the possibility of establishing standards as aids in the selection of prospective teachers, very little success has attended the efforts of investigators and research workers in this particular field. While other studies have been made, the following references seem to illustrate. The relation of intelligence and teaching success has been found to have little significance.⁶⁵ It appears that the student teaching group is a select group from the standpoint of intelligence and that a degree of intelligence above that necessary for successful work in college has little or no predictive value. While Cahoon⁶⁶ concludes that college marks seem to offer no better criteria of success in practice teaching than do intelligence test scores, Ullman⁶⁷ found that academic and professional marks have some value in predicting teaching success, and Whitney and Frazier conclude that:

Achievement in college academic subjects as measured by teachers' marks is more significant as a means of predicting success in student teaching than is intelligence.⁶⁸

Ullman found that:

When several factors found to be related to teaching success are combined in a regression equation, predictions of teaching success which are quite accurate may be made.⁶⁹

On the other hand, after spending two years evaluating the techniques by which teachers were selected, Tiegs apparently attaches little value to any criteria now used in the selection of teachers.⁷⁰

In so far as revealed by the catalogues and bulletins of the institutions under consideration, such selections of students for directed teaching as is attempted usually depends upon academic standing as indicated by teachers' marks or recommendations by the head of the department in which the student has majored. Often certain profes-

⁶⁵ William H. Pyle, "The Relation Between Intelligence and Teaching Success: A Supplementary Study," *Educational Administration and Supervision*, XIV (April, 1928), 257-67; F. L. Whitney and C. M. Frazier, "The Relation of Intelligence to Student Teaching Success," *Peabody Journal of Education*, VIII (July, 1930), 3-6; and G. P. Cahoon, "Intelligence Test Scores as a Factor in the Prediction of Practice Teaching Success," *University High School Journal*, IX (November, 1929), 205-27.

⁶⁶ G. P. Cahoon, "Marks in College as a Factor in the Prediction of Practice Teaching Success," *University High School Journal*, X (May, 1930), 41.

⁶⁷ Roy R. Ullman, "The Prediction of Teaching Success," *Educational Administration and Supervision*, XVI (November, 1930), 608.

⁶⁸ F. L. Whitney and C. M. Frazier, *op. cit.*, p. 6.

⁶⁹ *Ibid.*, p. 608.

⁷⁰ Ernest W. Tiegs, "The Evaluation of Teaching," *Los Angeles Research Bulletin*, X (January, 1930), 10-11.

sional courses are specified as prerequisite. While special methods courses are usually required before practice teaching, in some of the institutions instruction in methods, if given at all, seems to form a part of the directed teaching course.

Of the 20 state universities with university high schools, only one requires the student to pass an examination on the subject to be taught before teaching it.⁶¹ However, it seems from official bulletins and information submitted by the principals of these schools that students generally must have senior standing in the major or minor subject before being permitted to teach it.

Credit for Directed Teaching.—Catalogues of the 49 institutions included in this study were examined for the purpose of determining

TABLE XXXVIII
CREDIT ALLOWED FOR DIRECTED TEACHING IN STATE UNIVERSITIES

Semester Hours	State Universities with University High Schools*		State Universities without University High Schools†	
	Number	Per Cent	Number	Per Cent
Two	2	10.0	3	10.3
Three	5	25.0	6	20.7
Four	4	20.0	4	13.8
Five	4	20.0	4	13.8
Six	2	10.0	8	27.6
Seven	0	0.0	0	0.0
Eight	0	0.0	1	3.4
Nine	0	0.0	0	0.0
Ten	1	5.0	0	0.0
Eleven	0	0.0	0	0.0
Twelve	0	0.0	1	3.4

The data in this table were taken from official publications of the institutions concerned. In several instances, it was obvious that the course in directed teaching involved the equivalent of a methods course which would have been listed as a separate course by another institution. In those cases where it was indicated that credit would be given within certain specified limits, the maximum figures were used.

* One institution does not offer a course in directed teaching and the catalogue of one does not indicate the number of hours credit to be allowed.

† One institution does not offer a course in directed teaching and the amount of credit given for directed teaching is not indicated in the catalogue of another.

the amount of credit given for directed teaching. Table XXXVIII shows the results of this investigation. While there is a slight tendency for more credit to be given in those institutions which use off-campus schools for directed teaching purposes than in those institutions with campus schools, no evidence was found to indicate that the type of laboratory facilities had anything to do with the amount of credit given.

The matter of most vital concern here is the range in the amount

⁶¹ The same institution gives a comprehensive examination at the close of the senior year covering all of the required work in education.

of credit given by the various institutions. It will be noted that the amount of credit varies from two to 10 semester hours for the university high school group of institutions and from two to 12 semester hours for the other group. Although the organization of the courses and the time consumed by the courses vary, the elements of time and effort do not always seem to be the determining factors with respect to credit allowed. The most common practice seems to require five hours per week for a semester for directed teaching. A number of institutions allow two semester hours credit for this work, whereas others allow three, four, five, and even six hours credit for what appears to be approximately the same course according to catalogue descriptions. This conclusion is verified by a study made by Haertter and Smith involving 32 colleges and universities. They found a variation from two to six semester hours credit for student teaching for five hours per week during one semester.⁶²

OTHER FUNCTIONS OF THE UNIVERSITY HIGH SCHOOL

In addition to those functions related to student teaching and instruction of the pupils enrolled, which have already been discussed, this section will deal very briefly with the following functions: (a) relation of the university high school to theory courses, (b) its relation to the educational program of the state, (c) the research function, and (d) the relationship of the university high school to the summer session.

Relation to Theory Courses.—We hear much about the laboratory school being the heart of the normal school or the teachers' college. Mead points out that the laboratory school should be used for the professionalization of the teaching of both subject-matter and theory courses.⁶³ President Donovan of Eastern Kentucky State Teachers College believes that:

Unless the psychology is applied, the principles of teaching observed, and the methods practised, they are about as worthless as Hamlet's reading of words, words. When these subjects are taught in relation to the work of the laboratory, which is the training school, they have a very vital part to contribute to teaching skill.⁶⁴

⁶² Leonard D. Haertter and Dora V. Smith, "An Investigation into the Methods of Student Teaching in Thirty-Two Colleges and Universities," *Educational Administration and Supervision*, XII (December, 1926), 578.

⁶³ A. R. Mead, *Supervised Student Teaching*, pp. 548-549. (Richmond: Johnson Publishing Company, 1930.)

⁶⁴ H. L. Donovan, "The Twofold Purposes of the Teachers College," *The Journal of the National Education Association*, XIX (December, 1930), 306.

The same point of view is expressed in the *Survey of Land-Grant Colleges and Universities*.⁶⁵

No attempt was made, in connection with this study, to determine the extent to which laboratory schools are used in connection with theory and subject-matter courses. It was found, however, that in only 11 of the land-grant colleges and universities were special demonstration lessons, in which practice pupils were utilized, taught in connection with academic or theory courses other than student teaching.⁶⁶

TABLE XXXIX

RESEARCH STUDIES CONDUCTED IN CONNECTION WITH THE UNIVERSITY HIGH SCHOOL WHICH COULD NOT HAVE BEEN DONE WITH THE SAME SUCCESS IN CONNECTION WITH A COOPERATING PUBLIC SCHOOL

Number of Studies	Frequency
None	10*
One	1
Two or three	1
Three	1
Six or eight	1
Twelve	1
Several	2
No reply	3
TOTAL	20

* One of these schools has 16 controlled experimental studies projected for the next two years.

Research.—The material presented in the first section of this chapter indicates that research is recognized as one of the primary functions of the university high school. This naturally leads us to inquire into the research activities of this type of school.

The material presented in Chapter III shows that the research program of education departments of state universities which depend on cooperating public schools for laboratory facilities is greatly restricted by state and local regulations.⁶⁷ In case of the 20 institutions which have university high schools, we find very little legal restriction with respect to the use of specified curricula or adopted text-books. According to information furnished by the principals of these schools, only one is required to use state adopted texts, and only two are required to use state adopted curricula.

Since it is generally believed that the college or university controlled school is more desirable for experimentation than the public

⁶⁵ *Op. cit.*, p. 197.

⁶⁶ *Op. cit.*, pp. 196-197.

⁶⁷ See pp. 27-29.

school, the following question was asked the principals of the 20 university high schools: "How many experiments or research studies have been conducted in connection with the university high schools by teachers or graduate students within the last two years which could not have been done with the same success in connection with a cooperating public school?" A summary of the replies is given in Table XXXIX. In view of these replies one may have some misgiving concerning the exercise of the research function in the university high school.

The Summer Session.—Eleven of the 20 university high schools have summer sessions ranging from six to nine weeks. Nine of these schools provide facilities for observation and directed teaching during the summer session, one for observation only, and the other seems to have no connection with the summer session of the college. With one exception, the regular teaching staff is used so far as needed. All of the schools which provide for directed teaching indicate that the same directed teaching standards are maintained during the summer session as during the winter session.

Relation to State Education Program.—Conferences with officials of the institutions visited give rise to the belief that there is a tendency, in some quarters at least, to make the university high school a potent influence in the educational program of the state aside from its training of teachers. A dean of a college of education, a professor of secondary education, and the head of a university high school department, each in a different state university, gave enthusiastic expression to the common belief that one of the major functions of the university high school was to bring together, try out and distribute information concerning curricula, methods, and other pertinent educational issues.

RELATED ADMINISTRATIVE PROBLEMS

In addition to the administrative problems which have already been discussed, some of the more important problems growing out of the very nature of the university high school should be mentioned briefly. These will be limited to (a) the direction of visitors, (b) the keeping of adequate records, and (c) the problem of public relations.

Receiving and Directing Visitors.—If the university high school is to be a model school as some advocate, or if it is to exemplify that which is best in teaching, supervision and administration as claimed by others, many interested visitors may be expected. For those schools

which claim to exercise the functions mentioned above, it is a matter of duty, to say nothing of courtesy, to see to it that any visiting educator, administrator, supervisor or teacher of the state utilizes his time to the very best advantage while visiting. It is a very agreeable experience for one to visit a school where every minute of his time is profitably spent with little evidence of inconvenience to the administrative or teaching personnel. It is not so pleasant, however, to spend a large portion of what should be a valuable day sitting in the office or standing in the corridor waiting for some official to finish a class or conference. Assuming, on the other hand, that no visitor should handicap the school in any of its regular duties, we might logically suggest the advisability of a well planned program for handling visitors.

Records.—No attempt has been made in connection with this study to determine the extent of record keeping and child accounting. It does seem, however, that the nature of the functions claimed for the university high school would necessitate a rather comprehensive system of records and pupil accounting.

Public Relations.—Aside from its own personnel and that of the institution with which it is connected, the university high school has important relationships with three other groups—the tax payer of the state, the school people of the state, and people of the local community.

Generally speaking, the university high school is dependent upon the public for its support. One of two policies may be followed in dealing with the public. One policy would be based on the theory that an intelligently informed public with respect to the functions of the university high school and its value to the education program of the state would have a tendency to strengthen its position as an essential feature of the public school program. The other extreme would be represented by the policy of securing financial support for the university high school by political maneuvering. The success of the former policy must depend upon the merits of the university high school as interpreted to the public by state university officials, whereas the success of the latter must depend upon the strength of political contacts between those interested in the university high school and those immediately responsible for state appropriations.

A favorable relationship between the university high school and the school people of the state is important for two reasons. In the first place, if properly informed concerning the merits of the university high school program, the influence of this group upon the

public should be very wholesome. In the second place, if the university high school has contributions to make to the education program of the state in addition to teacher training, the school administrators and teachers should know what services are available.

Observations of the writer in connection with this study lead to the conclusion that it is very difficult to develop and maintain an entirely favorable attitude of the local schools and local community toward the university high school. In so far as the observation of the writer is typical, the unfavorable criticisms of the university high school are based upon hearsay which is seldom substantiated by facts. This suggests the advisability of a conscious effort on the part of university high school officials to maintain pleasant relations with the people of the community and to bring about an intelligent understanding of the merits of this institution and its proper place in the education program of the community and the state.

THE UNIVERSITY HIGH SCHOOL BUILDING

No attempt has been made to go into the problem of school building construction in connection with this study. We are concerned here with the relationship of the building to those functions and needs of the university high school over those of the public high school. It is assumed that the instruction of the pupil must be cared for at all times. Visits to seven of the 20 schools under consideration and conferences with officials of these institutions lead to the conclusion that the following matters should be of greatest concern in the planning of a university high school building: (1) location, (2) size, (3) provision for demonstration and observation, (4) provision for conferences of supervising and student teachers, and (5) whether or not the type of building should be influenced by a desire to meet the immediate peculiar needs of the school as a laboratory school, to develop a model school, or to develop a school typical of public high school conditions.

Location.—According to information submitted by principals of university high schools, the high school buildings are so located that student teachers are able to reach it in the time allowed for change of class, with one exception; in 45 per cent of the institutions, however, the majority of the pupils are not within reasonable walking distance of the school. It is desirable, of course, to have the building so located that students scheduled for observation, participation or directed teaching may reach it with the minimum loss of time. It is also desirable to have it near at hand for those instructors in theory

courses who wish to observe certain procedures or who wish to demonstrate certain procedures. On the other hand, experience of some indicates that the location of the building with reference to the pupils who are expected to attend cannot be ignored.

Size.—A number of factors must be considered in determining the size of a university high school building. At least the following deserve consideration; pupils available, present and future needs, and facilities available for directed teaching through cooperative arrangements. As to which of these should have precedence in planning a building should be a matter of particular concern.

Type.—Some of the more recently constructed university high school buildings may be said to be model high school buildings in many respects. In at least one case, it is expected that public school officials of the state will visit the school and find many desirable features worth incorporating in new public high school buildings. According to reports from principals of university high schools, the facilities of their schools are inferior to those of the high schools of the same communities in two instances, equal or superior to those of public high schools in 12 instances, superior in five cases, and of a distinctly different type in another. This raises the question as to whether, after the requirements for efficient instruction of pupils and supervision of student teaching have been met, an attempt should be made to have the university high school building a model high school building, a typical high school building, or simply a building constructed to meet the immediate peculiar needs for teacher training without regard for similarity or dissimilarity to public school conditions.

Conference Rooms.—While there seem to be varying opinions among officials as to what constitutes adequate provision for conference rooms, the supervising teachers seem to be more nearly of one accord in the belief that every teacher should have a place where conferences with student teachers may be held without disturbance and especially without the presence of pupils. Buildings examined seem to indicate that there is a tendency to make more liberal provision for conference rooms in the more recently constructed buildings.

Demonstration Rooms.—In some quarters it is believed that the university high school should be available for group demonstration in connection with psychology and education courses, as has been pointed out in the early part of this chapter.⁶⁸ The question naturally

⁶⁸ See p. 41.

arises as to what provision should be made to accommodate classes who are to observe demonstrations. At least one school has provided a large demonstration room with a screened gallery sufficient to accommodate a large class of observers.' At the other extreme, one finds buildings with no observable difference in rooms used for observation and the typical classroom.

COST OF OPERATION

The cost of providing student teaching facilities is probably the greatest obstacle between the education departments of state universities and adequate teacher training programs. However worthy a program may be, or whatever the merits claimed for it, the adoption or operation of such a program cannot be divorced from the costs involved. That this problem has been of great concern to state university officials within recent years is evidenced by the following statement concerning a discussion at the 1925 meeting of officials of schools and colleges of education in state universities and land-grant colleges with respect to student teaching facilities.

A representative of one of the Middle West universities declared that it was doubtful whether the State could provide adequate laboratories for practice teaching, and another representative declared that laboratory work for teacher training was so expensive that it was doubtful whether it could be continued.⁶⁹

One might take a totally opposite point of view and assert that we have not been putting enough into our education program to attract the best teachers or provide adequate facilities for the training program. The figures given below would seem to justify such a conclusion. President Cowling of Carleton College, on the basis of accepted standards and a special study of 25 leading American colleges, has estimated that the annual expense for operating a liberal arts college of 1000 students is \$800 per student.⁷⁰ This estimate involves current expenses and interest charge on capital invested in grounds, buildings, and equipment. Statistics of teachers colleges⁷¹ for 1927-1928 show that the per student cost in 32 teachers colleges with enrollments between 800 and 1,199 is \$297.74. These figures are significant when we realize that the cost of professional training is usu-

⁶⁹ J. B. Edmonson and A. H. Webster, *Policies and Curricula of Schools of Education in State Universities*. Higher Education Circular, No. 30 (August, 1925), p. 32. Washington: United States Bureau of Education.

⁷⁰ Arthur J. Klein, *Higher Education, Biennial Survey, 1926-1928*. Bulletin No. 11 (1929), pp. 37-38. Washington: United States Bureau of Education.

⁷¹ Frank M. Phillips, *Statistics of Teachers Colleges and Normal Schools 1927-1928*. Bulletin No. 14 (1929), p. 6. Washington: United States Bureau of Education.

ally considered more expensive than that of the non-professional type.

An attempt has been made, as a part of this study, to determine the approximate cost of operating university high schools in state universities. To this end the following information was secured from the principals of each of the 20 schools: (1) the approximate value of buildings and equipment used by the high school; (2) the portion of the building used by the high school; (3) the budget provision for salaries and part salaries of high school personnel; (4) budget provision for other current expenses of the university high school. All of these figures were for the year, 1930-31. Although the many variables involved make a common basis for comparison impossible, the per student teacher cost seems most satisfactory since the majority of these schools seem to consider student teaching their major function. With the data mentioned above as the basis, the per student teacher cost was estimated for each institution with respect to interest on invested capital (calculated at 6 per cent); salaries and part salaries of high school teachers; other current high school expenses; salaries and other current expenses combined; and salaries, other current expenses, and interest on invested capital combined. In order that the net cost to the state might be determined, an effort was made to determine the income from tuition and other entrance fees of high school pupils.⁷² The total of the annual fees for each institution, in so far as this could be ascertained from official publications available, was multiplied by the number of high school pupils enrolled and divided by the number of students who were doing or expected to do directed teaching in the university high school during the year. This gave an estimate of the per student teacher income from high school tuition.

These figures were arranged in a table similar to Table XL, and mailed to the principal of each university high school for correction of the data for his school. The table was accompanied by a letter giving the basic data on which the calculations had been made. Nineteen of the principals replied. Corrections were made in several instances. For the one school which did not respond, there is nothing about the figures to suggest the probability of errors.

⁷² Catalogues and bulletins of all state universities were examined in an effort to determine income from student teaching fees. In so far as information was given on this point, it seems that only nine of these institutions have fees for student teaching. The fee is small, ranging in amount from \$1.00 per semester hour in two cases to \$10 for the course in one case. Five of the state universities with university high schools have the student teaching fee.

The corrected figures are given in Table XL. The figures given in the first seven columns cannot be properly interpreted without constant reference to the last column. A column showing the net cost per student teacher to the state has not been provided because some individuals do not consider interest on invested capital when calcu-

TABLE XL
PER STUDENT-TEACHER COST OF OPERATING UNIVERSITY HIGH SCHOOLS
IN VARIOUS STATE UNIVERSITIES

Institution	Number of Student Teachers	Per Student-Teacher Cost to the Nearest Dollar Calculated in Terms of					Per Student-Teacher Income from High School Tuition and Fees
		Interest on In- vested Capital	Salaries and Part Salaries	Other Current Expenses	Salaries, and Other Current Expenses	Salaries, Current Expenses, In- vested Capital	
1	83	\$ 23	\$181	\$ 14	\$195	\$218	\$ 31
2	150	110	240	27	267	377	61
3	175	61	229	57	286	347	48
4	136	22	125	9	134	156	0
5	90	89	227	31	258	347	138
6	65	100	161	15	176	276	10
7	153	39	175	7	182	221	0
8	250	121	344	40	384	505	46
9	300	34	187	15	202	236	55
10	50	150	560	80	640	790	311
11	100	24	161	22	183	207	28
12	150	60	119	12	131	191	6
13	125	24	80	8	88	112	28
14	76	47	196	26	222	269	9
15	100	45	140	20	160	205	0
16	40	23	188	28	216	240	101
17	140	129	135	8	143	272	141
18	81	74	92	18	110	184	0
19	400	23	165	9	174	197	17
20	40	38	500	50	550	588	68
Med.	112.5	40	178	19	189	238	29.50

This table may be read as follows: In institution No. 1, the annual cost for each of the 83 student teachers enrolled during the year 1930-31 involves \$23 as pro rata share of interest at 6 per cent on invested capital, \$181 in terms of salaries and part salaries dedicated to high school, and \$14 in terms of other current high school expenses. When all current expenses are considered, the per student-teacher cost is \$195, and when all current expenses plus invested capital are considered, the cost is \$218. The last column shows that the income from high school tuition and fees amounts to \$31 per student teacher.

lating operating expenses, while others believe that interest on invested capital should be considered along with current expenses. The arrangement of the table enables the reader to draw his own conclusions.

The figures of this table show that the per student teacher costs for the several institutions vary widely. When calculated in terms of the annual cost per student teacher, interest on invested capital ranges from \$22 to \$150, with a median of \$46; salary cost ranges from \$80 to \$560, with a median of \$178; cost of other current expenses ranges from \$7.00 to \$80, with a median of \$19. When combinations of these are made, similar variations, of course, are evident. The income from tuition, when calculated in terms of annual income per student teacher, ranges from nothing in four instances to \$311, with a median of \$29.50.

An analysis of the figures of this table does not lead to any definite conclusion. A glance at the figures for institutions 10 and 20 tempts one to conclude that it is very expensive to operate a university high school for a small group of student teachers. Although this conclusion is probably correct, other things being equal, figures for institutions 16 and 18 show that this is not always true. We find almost as much difference in the range of costs for operating those schools where student teacher enrollments are small as we find when all schools are considered. We observe the same when only those schools associated with large student teacher enrollments are considered.

It is safe to say that any comparison of the operating costs of one university high school with others on the basis of these figures, without taking into consideration other important factors (such as the functions of the school, efficiency of teachers trained, living expenses of the community, and so on), would have very little validity. However, such a tabulation will probably suggest to university high school officials an analysis of their own expenditures, and will give some conception of probable operating costs to those who are planning university high school programs.

Some will be tempted to compare the figures given in this section with operating costs of teachers colleges and conclude that the cost of operating a university high school is too great. Others may make comparisons with the per capita cost of operating liberal arts colleges or professional colleges, and conclude that greater expenditures could be justified in connection with the teacher training program. While such comparisons might be suggestive, the cost of operating university high schools, or any other costs incident to the training program, can be properly appraised only in terms of the effectiveness of such institutions, or programs, in providing that instruction which will result in those desirable changes in the lives

of the children of the state which constitute the objectives of the public education program.

SUMMARY

Official publications of state universities seem to indicate that the primary function of the university high school is to provide facilities for observation, participation and directed teaching. Experimentation is mentioned in 40 per cent of the bulletins. A smaller percentage of the schools emphasize the function of demonstrating good practice in teaching, supervision and administration, and one institution would make the university high school a model school for the state. While only 35 per cent of the publications indicated superior training of pupils as one of the functions of the school, it is probable that this was assumed by all of the schools. The only additional function advocated by professional writers was that of providing for apprentice teaching.

There seems to be a tendency among university high schools in favor of a five or six year school. As a group, there seems to be nothing unusual about the organization of these schools with respect to time units.

There seems to be no uniformity with respect to administrative procedure in the operation of university high school and directed teaching programs. Although the determination of high school policies is usually a cooperative matter, involving the high school faculty as well as other officials, the principal seems to figure most prominently in this activity.

An inter-departmental relationship is maintained by a majority of the institutions by having the high school department heads teach in the education department and, in a few instances, in the liberal arts college. Half of the university high school principals teach in the education department.

In 60 per cent of the institutions under consideration, the principal is eligible for the same privileges, rank and pay as other members of the education department staff. His salary is slightly better than that of the public high school principal in the same community. But, his qualifications are also superior in so far as indicated by degree, professional training and experience. Certain qualifications not essential for the public high school principal are suggested.

The training of the university high school teacher is superior to that of the public high school teacher of the same community in so far as indicated by degree held and the amount of professional

training. There is no significant difference in the amount of total previous experience of these types of teachers. However, a relatively large part of the university high school teachers are teaching in their present positions the first, second, or third year. This practice suggests the need for in-service training. Qualifications not essential for a public high school teacher are suggested for the university high school teacher.

The teaching load of university high school teachers varies widely among the different institutions. When judged by standards usually applied to public school situations, that is, when teacher training activities are not considered, the teaching load of university high school teachers is much lighter than that of public school teachers in the same community, or teachers of the North Central Association accredited schools. The highest rank that may be attained by university high school teachers and department heads varies from that of no rank to that of full professor. In 25 per cent of the institutions, it is possible for the high school teachers to attain professorial rank. Department heads are eligible for this rank in more than half of the institutions. Data of Table XXVII indicate that provision for tenure is more secure as one proceeds up the scale from teacher, to supervising teacher, to department head, to principal, and, finally, to supervisor of directed teaching. The salary of the university high school teacher is superior to that of the public high school teacher in the same community, or in the North Central Association schools. In the selection of teachers, the principal and the supervisor of directed teaching exercise important influence.

In most instances, a more liberal provision is made for clerical assistance in university high schools than in public high schools. However, there is great variation in the provision made for clerks in the different schools.

In most of the university high schools, the pupils do not seem to represent selected groups from the standpoint of intelligence; however, there is evidence that highly selected groups may be found within the enrollments. Availability of pupils is a matter of great concern in at least 25 per cent of these schools. On the other hand, 35 per cent report waiting lists.

The subjects offered in the university high school have a tendency to be of the college preparatory type. Relatively large enrollments are found in such subjects as Latin, French, mathematics and science, and relatively small enrollments in the more practical subjects. The extent and type of offering seems to be considerably influenced by

the size of the school. There is some evidence that the peculiar functions of the school exert some influence on the type of offering. Most of the university high schools are free from state restriction in matters of curriculum development and textbook selection.

Such evidence as is available indicates that the instruction in university high schools is of a superior type. The results of instruction as measured by standardized tests in 12 schools support this conclusion.

There is evidence that student teaching is the most important professional course for the prospective teacher. However, professional literature shows a need for more extensive training in this field for the prospective teacher with respect to the number of teaching subjects, the variation of methods, and experience in the non-teaching activities. There is a desire also in some quarters to have the prospective teacher get more extensive experience in responsible teaching under typical public school conditions before a certificate is granted. According to official bulletins, such selection of student teachers as is attempted is based upon teacher marks or recommendations from the department of the student's major. Student teachers must generally have senior standing, and certain professional courses are usually specified as prerequisites. The amount of credit given for student teaching varies widely. The most common practice seems to require five hours per week for one semester. For this amount of work, the credit allowed varies from two to six semester hours.

Research studies have been conducted in less than half of the university high schools within the last two years that could not have been conducted just as well in cooperating schools.

Eleven of the university high schools have summer sessions and nine of these provide facilities for directed teaching during the summer session.

Among the administrative problems growing out of the nature and functions of the university high school are (1) the receiving and directing of visitors in a way to conserve the time and interests of the visitors and the school, (2) the keeping of extensive records, and (3) the development of a public relations program involving the relations of the university high school to the taxpayers, the public school people of the state, and the local schools and community.

In planning a university high school building, it appears that the matters of greatest concern should be the location, size, provisions for demonstration and observation, provisions for conference rooms,

and the type of building with respect to its functions or similarity to public school buildings.

An analysis of the costs incident to the operation of university high schools does not lead to any definite conclusion. The annual per student teacher cost for operating these schools may be summarized as follows: Interest on invested capital (calculated at 6 per cent) ranges from \$22 to \$150 with a median of \$46; salary cost ranges from \$80 to \$560 with a median of \$178; and the cost of other current expenses ranges from \$7.00 to \$80 with a median of \$19. The per student teacher income from tuition and fees paid by high school pupils ranges from nothing in four instances to \$311 in one case with a median of \$28.

SUGGESTIONS FOR ADMINISTRATIVE GUIDES

The material of this chapter, which involves an analysis of practices in 20 university high schools as disclosed by information obtained through questionnaires, personal observation, conferences with officials, examination of official publications, and an analysis of theory as presented in professional literature related to this subject, suggests the following questions, the answers to which would be desirable in seeking to establish guides for the effective administration of a university high school:

1. What functions should be recognized by the university high school?
2. What provision should be made with respect to personnel and organization for the coordination of the functions involved in the administration of the university high school and directed teaching activities?
3. What should be the official relationships of those individuals responsible for administering the more or less unrelated activities peculiar to the university high school?
4. Who should be responsible for those activities related both to the high school program and the directed teaching program?
5. Who should have final responsibility for determining high school policies?
6. What qualifications should the university high school principal possess and what official status should be accorded him by the university?
7. What should be the policy of university high schools with respect to the selection, the qualifications, the teaching load, the rank and pay of the teaching personnel?

8. What provision should be made for clerical assistance?
9. What policies should be observed in the selection of pupils and with respect to pupil accounting?
10. What should be the guiding policies concerning curricular and extra-curricular practices in the university high school and the regulation of such activities by the state?
11. Concerning the matter of student teaching, what guides may be established with respect to the aim of this activity, the selection of student teachers, the extent of training, types and frequency of conferences, integration of theory and practice, and college credit for student teaching activities?
12. What policies should govern the university high school in its inter-departmental and public relations program?
13. In the establishment of a university high school, what criteria should be considered with respect to the location, size and type of the building, and what provision should be made for demonstration and conference rooms?

CHAPTER V

FORMULATION AND EVALUATION OF ADMINISTRATIVE GUIDES

IT was indicated in Chapter I that one of the major purposes of this study was to formulate and evaluate administrative guides which might have some value in the administration of laboratory schools used by education departments of state universities in connection with the training of teachers for secondary schools. It is the purpose of this chapter to describe the technique used in the formulation and evaluation of the administrative guides and to present the results of these efforts.

Formulation.—As the first step in the formulation of the administrative guides, professional literature which seemed in any way related to the subject of laboratory schools was examined. Approximately 200 books, monographs, bulletins and magazine articles were carefully analyzed. In addition to these, official catalogues and bulletins of state universities were examined. Notes were made of significant practices and theories as indicated in professional literature and official publications. From an analysis of these notes, tentative administrative guides were formulated. An effort was made to limit these guides to those which would be peculiarly applicable to the administration of laboratory schools on the secondary level and related activities. Those principles which would apply to any secondary school were generally neglected. No attempt was made to further evaluate those standards which have been set up by such accrediting agencies as the American Association of Teachers Colleges.

These tentative guides were arranged in the form of a convenient check-list and submitted to three professors of education at the University of Michigan, two professors of education at the University of Virginia and one professor of education at the University of South Carolina to be checked and criticized. A conference was held with each of these individuals. The tentative list of guides was revised in light of the criticism offered.

At this point in the development of these guides, the writer visited 10 of the state universities¹ for the purpose of observing the work of laboratory schools connected with these institutions and conferring with officials concerning the administration of these schools. These observations and conferences resulted in the formulation of several additional guides and the revision of others. Also, it was at this

¹ For the institutions visited, see p. 4.

stage of the development of the administrative guides that questionnaires were mailed to the 49 institutions included in this study.² While the questionnaires were a part of the program necessary for determining the status of laboratory schools as set forth in the preceding chapters, when the data were assembled and the many significant comments reviewed, it was again necessary to revise the tentative administrative guides.

After these several revisions, the tentative list was again submitted to three professors of education at the University of Michigan for criticism. The final revision was undertaken after a conference with each of these. The tentative list of administrative guides was then mimeographed and made ready for checking by a carefully selected jury of competent educators. A copy of this check-list appears in Appendix C, page 140.

Evaluation.—In consultation with several professors of education at the University of Michigan, it was decided that a jury for the purpose of evaluating the proposed administrative guides should be chosen from those officials closely associated with the teacher training work of state universities. It was also decided that 10 should be chosen from each of three types of officials; that is, 10 deans of education departments of state universities, 10 directors of teacher training or supervisors of directed teaching, and 10 principals of university high schools.

The writer prepared a list of deans, a list of directors of supervised teaching and a list of principals of university high schools. An attempt was made to have all sections of the country represented in each list, and to have all types of schools represented in so far as important administrative practices are concerned. These lists were submitted to three professors of education with the request that they select from each group the names of the 10 individuals in whose judgment, with respect to laboratory school administration, they would have greatest confidence. These, working independently, nominated 10 from each group. On the basis of these three estimates, the jury was selected. Only one of the 30 to whom the checklist was submitted failed to respond. The list given below,³ therefore, includes only one substitution.

The evaluation of the tentative guides called for the exercise of three different techniques. For the first 37 items, the jurors were requested to check those items or sub-items which seemed sufficiently important to be accepted as guiding principles in the administra-

²Copies of the questionnaires mentioned may be found in Appendix B, page 133.

³For the names of those composing the jury, see Appendix C, p. 148.

tion of laboratory schools. Ideal conditions were to be assumed in checking each item. This technique is based on the assumption that any guiding principle, regardless of its degree of importance, should be utilized in the administration of a laboratory school unless such use is prevented by justifiable causes.

The ranking technique was used in the case of Items 38 to 47 inclusive. Here the jurors were requested to rank the sub-items in order of preference, using 1 to indicate first preference; 2, second preference; 3, third preference, etc. This technique was used because it was believed that it was more significant to know the relative importance of the sub-items than it was to know whether or not each of the sub-items was important. An entirely different technique was necessary in dealing with the last five items. The problem here was simply to indicate the most desirable frequency of the different types of conferences indicated, if desirable at all. Provision was made for this to be done by encircling a single numeral under each of the five items.⁴ Types of conferences not desirable were not to be checked.

The Evaluated Administrative Guides.—The complete list of tentative administrative guides which was presented to the jury of deans, directors and principals is given in Table XLI, Parts I, II and III. An attempt has been made to present, in an impartial manner, the judgments of the 30 jurors with respect to each item, or sub-item. To this end the substance of any significant comment by any juror has been included in the footnotes.

Part I of Table XLI has to do with the first 37 items in the check-list, including 93 sub-items. These items and sub-items appear in the same order as when submitted to the jury. The numerals in the first three columns at the right of the table represent the number of deans, directors and principals, respectively, who have indicated that the item or sub-item concerned, according to their judgment, should be accepted as a guiding principle in the administration of laboratory schools. The fourth column represents the same for the total of the three groups expressed in terms of percentages. It is not expected, of course, that even the best informed men would react in the same manner with respect to these various items. However, it will be noted that there is a remarkable uniformity of judgment indicated by the three groups of jurors in checking most of the items. In other words, if an item is accepted favorably by one group it is likely to be accepted in the same way by the other two groups, and vice versa. An examination of the tabulation shows that certain of the tentative administrative guides may be accepted with confidence,

⁴For scoring directions, see Appendix C, p. 146.

in so far as we are willing to accept the judgments of this jury, that some must be considered of doubtful value, and that others must be rejected. Examples of such, given in the same order, may be found by referring to Items 8, 10 and 20.

Part II of Table XLI deals with Items 38 to 47 inclusive, involving 41 sub-items. The sub-items have been re-arranged in order of preference according to the combined rating of three groups of jurors. The numerals at the right of the table represent the relative values assigned sub-items by each of the three groups and by the three groups combined. The numeral "1" would represent a perfect first rank score for any sub-item, and the lowest possible rank would be represented by the number of sub-items; that is, if there were five sub-items to be ranked, the numeral "5" would represent the lowest possible ranking for any of the five items. Thus, while the order of arrangement of the sub-items shows the picture as represented by the opinion of a majority of the jurors, the numerals in the four columns to the right of the table give a detailed picture in which the judgment of each juror is registered. This procedure seems to be important since most of the material of this table involves controversial matters.

Part III of this table is concerned with Items 48 to 52, all of which have to do with student-teacher conferences. An attempt was made here to determine the types of conferences which seemed desirable and the frequency with which such conferences should be conducted. Since the members of the evaluating committee were requested to check only those types of conferences which seemed to them desirable, it is important to note the number of individuals in each group who did not check the items being considered. The numerals in the first three columns at the right of the table represent the number of deans, directors and principals who advocate that a particular type of conference be conducted a given number of times each week or month, except that the last row of figures for each item indicates the number from each group who did not check the item. The numerals in the last column show the same for the total of the three groups expressed in terms of percentages. It appears from the data that those who did not check a given item, unless explained in a foot-note, did not consider the type of conference described desirable.

Since the final chapter of this study may be considered an interpretation of the evaluated administrative guides, further discussion of the contents of Table XLI is probably not essential.

TABLE XLI, PART I
THE EVALUATED ADMINISTRATIVE GUIDES

Administrative Guides	Frequency			Per cent of Total
	Deans	Directors	Principals	
1. A system of laboratory schools should include:				
(a) A school on or near the campus controlled by the university to be used for teacher training purposes.....	8	10	9	90.0
(b) One or more off-campus schools closely affiliated with the university for the purpose of furnishing additional directed teaching facilities under more typical conditions	9	10	9	93.3
(c) A number of additional cooperating public schools to be used as an aid in the training of administrators and supervisors	8	8	7*	76.7
(d) A university controlled school for experimental purposes	10†	8	9	90.0
(e) A university controlled school for demonstration purposes	9†	8‡	9	86.7
2. The university high school should recognize the following functions:				
(a) To provide facilities for observation, participation and directed teaching...	7§	10¶	9	86.7
(b) To provide facilities for controlled educational studies	10	9¶	9**	93.3
(c) To provide observation opportunities in relation to education courses.....	10	9¶	8	90.0
(d) To demonstrate good practice in administration, supervision, and teaching	10	10	9	96.7
(e) To mobilize, evaluate and distribute information concerning curricula, methods, and other pertinent educational issues	7	7	7††	70.0
(f)	1††		1††	6.7

The numerals in the first three columns at the right of this table represent the number of deans, directors of teaching training, or supervisors of directed teaching, and principals of university high schools who consider the item or sub-item checked of sufficient importance to be accepted as a guiding principle in the administration of laboratory schools. The fourth column represents the same, expressed in percentages, for the three groups combined. For example, the first sub-item is approved by eight deans, 10 directors and nine principals, or 90 per cent of those composing the three groups. Since each group is composed of 10 individuals, the numerals in the first three columns may be converted into percentages by adding the symbol "0."

* Two other principals made notations indicating that such an arrangement would be desirable, though they did not check the item.

† One dean pointed out that items (d) and (e) could be combined and another dean advocated the combination of items (a), (d) and (e).

‡ One director favored the use of a cooperating school for this purpose.

§ One other dean indicated that this function should be recognized if 1(b) is not provided.

¶ One director believes these functions with the exception of directed teaching should not be exercised in the school used for training purposes.

** Two principals consider (b) distinctly subordinate to (a).

†† One principal considers this the responsibility of the education department as a whole.

‡‡ One dean who did not vote for 2(a) suggests provision for student teacher observation, and one principal who did not check any of the sub-items under 2 suggests that

TABLE XLI, PART I (*Continued*)

Administrative Guides	Frequency			Per cent of Total
	Deans	Directors	Principals	
3. The university high school should foster a public relations program involving a conscious attempt:				
(a) To inform the people of the state with respect to its functions and its contributions to the state	9	9	8	86.7
(b) To inform school administrators and secondary school teachers of the state with respect to the services offered by the university high school	9*	10	10	96.7
(c) To inform the local community with respect to its function, its relation to the community and its advantages to the community	7	10	10	90.0
(d) To maintain pleasant relations with local public schools and the local community generally	9	9	10	93.3
4. Frequency of visits and the varying interests of visitors to the university high school makes necessary a well planned program for handling callers in order that the best interests of the school and visitors may be served	9	9	9	90.0
5. In addition to the usual facilities of a public high school, the building plans for a university high school should include facilities for group demonstration and observation by providing:				
(a) One or more large rooms with galleries sufficient to seat large classes of students in methods and other education courses	5	7†	4	53.3
(b) One or more large rooms without galleries	5	6	5	53.3
(c) One or more rooms that may be enlarged by folding partitions	4	7	4	50.0
(d)	2‡	2‡	0	13.3
6. In addition to the usual facilities of a public high school, the building plans for a university high school should provide:				
(a) One conference room for each class room	5§	5§	3	43.3

all of the functions listed be recognized provided they were not mixed with the training program.

* One dean made the following notation: "The head of each university high school department should acquire leadership of the high school teachers of the state. He or she should come to be looked to as an authority. His or her correspondence should be heavy."

† One director would advocate such an arrangement for a demonstration school but would want a very limited number of visitors in the training school.

‡ One dean and one director advocate having all rooms large enough to seat eight to fifteen visitors. One dean advocates a room for educational exhibits and one director would have a small room for group work.

§ One dean and one director advocate a conference room for each teacher.

TABLE XLI, PART I (*Continued*)

Administrative Guides	Frequency			Per cent of Total
	Deans	Directors	Principals	
(b) One conference room for every two class rooms	0	3	4	26.7
(c) One conference room for every three class rooms	3	2	2	23.3
(d) One conference room for every four class rooms	0	0	1	3.3
7. The duties of each member of the university high school staff and the duties (with respect to the high school) of each individual indirectly associated with the university high school should be clearly defined.....	8*	8†	9	83.3
8. In addition to other qualifications usually required of a good public high school principal, the principal of a university high school should possess the following qualifications:				
(a) The quality of cordial cooperation..	10	10	10	100.0
(b) Efficiency in handling public relations problems	10	9	10	96.7
(c) Efficiency in personnel management..	10	9	10	96.7
(d) Knowledge of the philosophy underlying teacher training activities.....	10‡	10‡	10	100.0
(e) Familiarity with recognized procedure in teacher training	10	10	10	100.0
(f) Successful experience as a high school principal	10	8	10	93.3
(g) Academic and professional training equivalent to that of other members of the education department staff....	8§	10	10	93.3
(h) Familiarity with school conditions and school needs of the state.....	10	10	10	100.0
9. In the selection of teachers for the university high school, the following individuals should have a voice:				
(a) Dean of the education department....	8	10	8	86.7
(b) Director of teacher training (if different from the principal and the supervisor of directed teaching).....	8	9	9	86.7
(c) Principal	10	10	9	96.7
(d) Supervisor of directed teaching.....	8	8	8	80.0
(e) Head of the high school department concerned	9	9	9	90.0

* Another dean indicates that there must be a general notion of functions and that duties will grow up with the position in accord with the general functions.

† One of the other two directors indicates that the duties should not be too rigidly defined, and the other believes that efficient workers should understand without definition.

‡ One dean would include "Interest and capacity in the field of subject matter and method research," and one director emphasizes the importance of this particular item.

§ One dean adds: "Interest in experimentation and a scientific attitude are very important."

TABLE XLI, PART I (*Continued*)

Administrative Guides	Frequency			Per cent of Total
	Deans	Directors	Principals	
10. Final responsibility for selection (not election) of teaching personnel in the university high school should rest with:				
(a) Dean of the education department...	8	5	4	56.7
(b) Director of teacher training	2	3	3	26.7
(c) Supervisor of directed teaching.....	0	1	0	3.3
(d) Principal	4	5	4	43.3
(e) Head of the high school department concerned	0	1	0	3.3
11. Eligibility for the privileges, rank, and pay enjoyed by other members of the education department staff should be accorded:				
(a) The supervisor of directed teaching..	10	9	10	96.7
(b) The principal of the university high school	9	9	9	90.0
(c) The heads of high school departments	5*	8	7	66.7
(d) The supervising (critic) teachers...	5*	5	6	53.3
12. Provision should be made for an interrelationship (e.g., the department heads of the university high school teaching also in the education department, or liberal arts college) between the university high school and				
(a) The education department.....	10	10	9	96.7
(b) The related departments of the liberal arts college	9	6	6†	70.0
13. The functions of a university high school over and above those of a public high school, necessitate a comprehensive system of records and pupil accounting.....	8	6	9	76.7
14. Provisions for clerical assistance in the university high school should be sufficient for the following purposes:				
(a) Adequate record keeping	10	9‡	10	96.7
(b) Handling of routine matters in the principal's office	10	9	10	96.7
(c) Stenographic work involved in the administration of the school.....	10	10	10	100.0
(d) Relieving teachers of routine clerical work	10	9	9	93.3
(e) Assisting department heads with professional correspondence	8	9	9	86.7
(f) Assisting teachers with professional correspondence	8	8	7	76.7

* One dean sees no need for making the head of a high school department or the supervising teacher a professor but would advocate the same or better pay for many of them.

† Another principal indicated that such a relationship was theoretically desirable but full of difficulties.

‡ One director believes that "too many clerks and records are an abomination to the Lord."

TABLE XLI, PART I (Continued)

Administrative Guides	Frequency			Per cent of Total
	Deans	Directors	Principals	
(g) Provide technical assistance in connection with statistical studies	9	7	10	86.7
(h)	0	4*	3*	23.3
15. Provisions for cooperative relationships between teacher training institutions and public schools should guarantee				
(a) To the public schools—				
(1) Educational outcomes equal or superior to those formerly achieved	10	9	8	90.0
(2) Final authority to public school officials in all matters affecting the welfare of the pupils.....	8	8	7	76.7
(b) To the teacher training institution the right to do enough close supervision to assure the growth of the student teachers and the pupils	10	9	8	90.0
16. Provision for cooperative relationships between teacher training institutions and public schools should be clearly defined in a written contract	10†	7	9	86.7
17. The expense to the community incident to the operation of one or more cooperating laboratory schools should not exceed the expenditure normally required for such a school or schools	9	8‡	8	83.3
18. The advantages to the community of the cooperative arrangements between the university and the public schools should be evident to the community	10	8	9	90.0
19. The university and the public school authorities should foster a well directed public relations program for the purpose of keeping the community informed with respect to the advantages offered by the co-operative program	8§	8§	8	80.0
20. The official relationship of the superintendent of a cooperating school system to the teacher training program should be recognized by the university as follows:				
(a) By allowing college rank (assuming, of course, that he is qualified).....	1	0	3	13.3

* Four directors and three principals listed additional activities for which clerical assistance should be provided. All of these, however, could be classified under one or more of the sub-items listed.

† Two deans give warning against too great detail.

‡ One director believes that the simpler and more flexible the agreement, the better it works.

§ Of the other two deans, one advises against publicity campaigns and the other warns against the danger of too much publicity. One director believes it best to "deliver the goods and keep still."

TABLE XLI, PART I (*Continued*)

Administrative Guides	Frequency			Per cent of Total
	Deans	Directors	Principals	
(b) By subsidizing the superintendent's salary	2	2	1	16.7
(c) By making him a teacher in the education department	2	2	3	23.3
21. The importance of the relationship of the principal of the cooperating high school to the teacher training program should be recognized by the university as follows:				
(a) By allowing college rank (assuming, of course, that he is qualified)	0	1*	4	16.7
(b) By subsidizing the principal's salary	3	5	5	43.3
(c) By making him a part time teacher in the education department	1	2	4	23.3
22. Supervising (critic) teachers working in cooperating public schools should be selected as follows:				
(a) Selected by the university and approved by the public schools	5	6	4	50.0
(b) Selected by the public schools and approved by the university	3	1	4	26.7
(c) Selected by the university from the high school staff already employed..	1	1	2	13.3
23. The supervising (critic) teacher in any type of laboratory school should possess the following qualifications:				
(a) Master's degree or the equivalent with major emphasis on the subject which he teaches	9	10	8	90.0
(b) Knowledge of the philosophy underlying modern teaching methods and educational activities	9	10	10	96.7
(c) Understanding of the philosophy underlying the principles of supervision	9	10	10	96.7
(d) Successful teaching experience.....	10	9	10	96.7
(e) A disposition to influence constructively the educational activities of the state within his particular field	10	9	8	90.0
(f) The attitude of an educational pioneer	7	6	6	63.3
(g) A spirit restless in its search for improvement of present practices	9	9	6	80.0
24. The student body (with respect to types of pupils) of a laboratory school should be:				
(a) Typical of a public school group.....	10	10	9	96.7
(b) A select group with respect to superior intelligence	0	0	0	0.0
(c) A group chosen to include a large number of problem cases	1	0	0	3.3

* One director says, "The value of directed teaching when properly organized is so great that a principal should be glad to do most anything to get this free service for the schools."

TABLE XLI, PART I (*Continued*)

Administrative Guides	Frequency			Per cent of Total
	Deans	Directors	Principals	
25. Curricular and extra-curricular activities of a laboratory school should represent in practice that which is most generally accepted in theory	8*	8*	10*	86.7
26. Laboratory school facilities for summer school students should not be inferior to those of the regular session	10	9†	10†	96.7
27. Laboratory schools should not be bound by state regulations with respect to:				
(a) Organization (e.g., junior high school, senior high school, six year high school, etc.)	10	10	7	90.0
(b) Curricula	10	10	7	90.0
(c) Textbooks	10	10	8	93.3
28. The teaching load of the supervising (critic) teacher should be so reduced in amount and variety as to permit:				
(a) An adequate schedule of conferences with student teachers	10	10	9	96.7
(b) Extensive preparation for classes....	9	8	9	86.7
(c) Independent research	6‡	6	5	56.7
(d) Investigations, under expert direction, of delimited problems affecting pupil instruction or teacher training..	10	8	8	86.7
(e) Advanced study	7§	6	5	60.0
29. A program of in-service training should be provided for supervising (critic) teachers with respect to:				
(a) Pupil instruction	7¶	7	5	63.3
(b) Student teacher supervision	8¶	7	9	80.0
30. Recognition and rewards of the supervising (critic) teachers should be great enough to attract the best teachers	10	10	9	96.7
31. For the sake of pupil welfare, the student teacher, and the teaching profession, teacher training officials should make a consistent effort to discover standards whereby prospective teachers may be more highly selected	10	10	9	96.7
32. Student teachers should be required to do supervised teaching in				
(a) One subject	4	3	2	30.0

* One dean, one director and one principal indicate that this principle should be acceptable as a general proposition but should not preclude experimentation.

† Five directors and one principal, although subscribing to this as desirable, emphasize the difficulty of its realization.

‡ One dean points out that this applies only to those who are prepared.

§ One dean advocates providing for advanced study for a limited number of teachers, and another indicates that only a limited amount of time should be devoted to advanced study.

¶ One dean warns against too much direction since it tends to take away professional spirit.

TABLE XLI, PART I (*Continued*)

Administrative Guides	Frequency			Per cent of Total
	Deans	Directors	Principals	
(b) Two subjects (major and minor)...	6*	7*	7*	66.7
(c) Three subjects	0	0	1	3.3
(d) Four subjects	0	0	0	0.0
33. So far as possible, provision should be made for student observation and participation in those activities (in addition to directed teaching) which the beginning teacher may be expected to direct	10	10	9	96.7
34. All observation and participation activities should be directed in accordance with a well defined program	9†	8	10	90.0
35. Observation, participation and directed teaching should be accompanied by a systematic effort to integrate theory and practice	10	9‡	9	93.3
36. After completion of a course in observation, participation and directed teaching, the prospective teacher should have the opportunity of assuming for a period full control of a class in a typical public school situation with full responsibility for the results obtained before a permanent certificate is awarded	9	6	7	73.3
37. College credit allowed for observation, participation, and directed teaching should be commensurate with the time and effort required, and determined by the same standards as credit for academic and laboratory work of the traditional type...	9	8	9	80.7

* One dean, two directors and one principal point out the desirability of more varied experience but also point out practical difficulties.

† The other dean believes that some direction is essential but sees no need for a "well defined program."

‡ One director objects that "learning is not systematic," and that integration of theory takes place through experience.

TABLE XLI, PART II

Administrative Guides	Rankings			
	Deans	Directors	Principals	Total
*38. Criteria to be considered in the location of the university high school (aside from the consideration of available space and money) are as follows:				
(a) Accessibility to student teachers and student observers	1.3	1.9	2.2	1.8
(b) Accessibility to pupils	2.1	2.4	1.6	2.0
(c) The type of pupil desired	3.6	2.8	3.1	3.2
(d) Accessibility to education department teachers	3.5	3.1	3.4	3.3
(e) Landscaping possibilities	4.4	4.8	4.7	4.6
†39. Criteria for determining the size of a university high school building are as follows:				
(a) Probable future needs.....	1.3	1.7	1.2	1.4
(b) Facilities available for directed teaching through cooperative arrangements	2.7	2.3	2.1	2.4
(c) Pupils available	2.3	2.8	2.9	2.7
(d) Present need	3.6	3.2	3.4	3.4
‡40. Beyond the requirements for efficient instruction of pupils and efficient supervision of student teaching, an attempt should be made to make the university high school building				
(a) A model high school building.....	1.4	1.7	1.7	1.6
(b) A building to meet the immediate peculiar needs for teacher training without regard for the similarity or dissimilarity to public school conditions	2.3	1.9	1.8	1.9
(c) A typical high school building.....	2.4	2.5	2.5	2.4
§41. The principal of the university high school should be directly responsible to				
(a) Director of teacher training (if different from the supervisor of directed teaching)	1.8	1.8	1.7	1.8

In this table, the sub-items have been re-arranged in order of preference according to the combined rating of the three groups; for example, of the five sub-items under Item 38, "Accessibility to student teachers and observers" is considered most important by the combined jury and "Landscaping possibilities" is considered least important. Therefore, the former is listed first in the table and the latter is listed last.

The numerals at the right of this table represent the relative values assigned sub-items by the groups of deans, directors, principals, and the three groups combined. The numeral "1" would represent a perfect first rank score for any sub-item, and the numeral represented by the number of sub-items (in this case, 5) would represent the lowest possible rank of a sub-item. When ranking the five sub-items under Item 38 it is clear that the deans and the directors, when considered as groups, give Sub-item 1 first rank; but it is also clear that the vote was not unanimous by either group and that the vote of the deans was more favorable than that of the directors. A fuller explanation of the technique used in this connection may be found on page 106.

* This item was checked by nine deans, ten directors, and nine principals.

† This item was checked by nine individuals from each group.

‡ This item was checked by eight deans, ten directors and ten principals.

§ This item was checked by six deans, ten directors, and nine principals.

TABLE XLI, PART II (*Continued*)

Administrative Guides	Rankings			
	Deans	Directors	Principals	Total
(b) Dean of the education department..	1.7	1.9	2.2	2.0
(c) Supervisor of directed teaching....	2.6	3.0	2.7	2.8
(d) Head of department of secondary education	3.9	3.3	3.3	3.4
*42. Coordination of the functions involved in the administration of the university high school and directed teaching activities should be provided for				
(a) By combining into one office the principalship of the high school and the supervisorship of directed teaching	2.1	2.3	1.8	2.1
(b) By setting up a coordinating committee including the dean, the principal and the director of supervised teaching	2.0	2.7	2.7	2.5
(c) By centering the responsibility for the coordination of these functions in the dean of the education department	3.1	2.6	2.7	2.8
(d) By making the principal subordinate to the supervisor of directed teaching	3.3	3.4	3.9	3.6
(e) By making the supervisor of directed teaching subordinate to the principal	4.3	4.0	4.0	4.1
†43. Final responsibility for the determination of the policies of the university high school (assuming, of course, that opinions of teachers and others concerned will be considered) should rest with				
(a) Dean of the education department..	1.6	1.9	2.6	2.1
(b) The director of teacher training...	3.0	2.6	3.0	2.8
(c) A committee (composed of	3.6†	3.4†	3.1†	3.1
(d) Principal	3.6	3.3	2.5	3.1
(e) Supervisor of directed teaching....	4.0	3.8	3.8	3.9
§44. As a general policy, where education departments have both a principal of the university high school and a supervisor of directed teaching				
A. Responsibility for curriculum policies should rest with				
(a) The high school principal	1.5‡	1.5	1.1	1.4

* This item was checked by seven deans, nine directors and nine principals.

† This item was checked by seven deans, nine directors and nine principals.

‡ Of the 19 individuals who specified the desired composition of the committee, 13 advocated that it should consist of the dean, the principal of the university high school, and the director of teacher training or supervisor of directed teaching. Two deans and one director would include, in addition to these, representatives of other education and academic departments. One dean would have the committee consist of the principal and the director of teacher training only, and one director would have it composed of the dean, the director of teacher training and the head of the education department, while another director would include representatives from the public school board of the community concerned along with the dean and principal.

§ This item was checked by eight deans, ten directors and nine principals.

¶ Two deans would make a committee, including the principal and the supervisor of directed teaching, responsible for the activities listed under Item 44.

TABLE XLI, PART II (*Continued*)

Administrative Guides	Rankings			
	Deans	Directors	Principals	Total
(b) The supervisor of directed teaching	1.5	1.5	1.9	1.6
B. Responsibility for subject-matter supervision in the high school should rest with				
(a) The high school principal.....	1.5	1.5	1.3	1.4
(b) The supervisor of directed teaching	1.5	1.5	1.7	1.6
C. Responsibility for matters of high school administration (aside from curriculum development and subject-matter supervision) should rest with				
(a) The high school principal	1.0	1.0	1.0	1.0
(b) The supervisor of directed teaching	2.0	2.0	2.0	2.0
*45. The methods of instruction in a university high school				
(a) Should be influenced by only one criterion; namely, results measured in terms of pupil achievement....	1.5	1.8	1.6	1.6
(b) Should be varied systematically for the purpose of giving prospective teachers a background for evaluating in an open minded way the methods receiving emphasis in a given system	1.7	1.4	1.7	1.6
(c) Should be definitely influenced by a single instructional pattern; e.g., Dalton Plan, Morrison Plan, etc...	2.8	2.8	2.7	2.8
†46. Special methods courses should				
(a) Parallel student teaching	1.7	1.5	1.2	1.5
(b) Precede student teaching	1.4	1.5	2.1	1.7
(c) Follow student teaching	2.9	3.0	2.7	2.9
‡47. It should be the aim of the program of student observation, participation, and directed teaching				
(a) To insure a tolerable degree of immediate teaching skill and a basis of future growth in teaching service..	1.2	1.5	1.0	1.2
(b) To give the student an appreciation of the principles of correct practice as a basis of growth in teaching service	2.4	1.8	2.1	2.1
(c) To insure immediate success on the part of the beginning teacher	2.4	2.8	2.9	2.7

* This item was checked by nine jurors from each of the groups.

† This item was checked by eight deans, nine directors and nine principals.

‡ This item was checked by ten deans, eight directors and nine principals.

TABLE XLI, PART III

Administrative Guides	Frequency			Per cent of Total
	Deans*	Directors	Principals	
48. Regularly scheduled individual conferences between the student teacher and the supervising teacher should be conducted:				
(a) Once a month	0	0	0	0.0
(b) Twice a month	0	1	0	3.3
(c) Three times a month	0	0	0	0.0
(d) Once a week	4	0	2	20.0
(e) Twice a week	2	5	2	30.0
(f) Three times a week	0	1	1	6.7
(g) Four times a week	0	0	0	0.0
(h) Five times a week	0	3†	3†	20.0
(i) Not checked	4‡	0	2	20.0
49. Regularly scheduled group conferences between the student teachers and the supervising teachers should be conducted:				
(a) Once a month	0	0	1	3.3
(b) Twice a month	2	1	1	13.3
(c) Three times a month	0	0	0	0.0
(d) Once a week	2	6§	4	40.0
(e) Twice a week	0	0	1	3.3
(f) Three times a week	0	1	0	3.3
(g) Four times a week	0	0	1	3.3
(h) Five times a week	0	1	0	3.3
(i) Not checked	6	1	2	30.0
50. Regularly scheduled group conferences involving all student teachers in a given subject-matter field should be conducted:				
(a) Once a month	2	2	5	30.0
(b) Twice a month	0	4	1	16.7
(c) Three times a month	0	0	0	0.0
(d) Four times a month	5	3	1	30.0
(e) Eight times a month	0	1	1	6.7
(f) Not checked	3¶	0	2**	16.7

The numerals in the first three columns at the right of the table represent the numbers of deans, directors and principals who advocate a specified frequency of the type of conference given, and the numerals in the last column represents the same expressed in percentages for the three groups combined. For example, two deans, five directors and two principals, or 30 per cent of those in the three groups, advocate regularly scheduled individual conferences twice a week. Since there are 10 individuals in each of the three groups of jurors, the numerals in the first three columns may be converted into percentages by adding the symbol "0."

* Two deans did not check any of this group of items. One of them indicated that the types and frequencies of conferences would depend upon the students and situations concerned, while the other stated that he was not qualified to pass upon these items because of inexperience in this field. One other dean, although he checked the items listed, suggested that other combinations might be better than those listed.

† One director and one principal advocate daily conferences at the beginning of the term, and less often as skill is attained by the student.

‡ One of these deans, although he did not check Item 48 advocates frequent conferences at the beginning of the term and less frequent as skill is attained; another dean believes that this type of conference should be left to the discretion of the supervising teacher.

§ One director would eliminate this type of conference where students have a special methods course under a properly qualified instructor.

¶ One dean would have such a conference in the early part of the semester for orientation purposes.

** One principal indicates that methods courses make this type of conference unnecessary.

TABLE XLI, PART III (*Continued*)

Administrative Guides	Frequency			Per cent of Total
	Deans	Directors	Principals	
51. Regularly scheduled group conferences including all student teachers of all subject-matter fields should be conducted:				
(a) Once a month	3	4	4	36.7
(b) Twice a month	1	4	0	16.7
(c) Three times a month	0	0	0	0.0
(d) Four times a month	0	1	2	10.0
(e) Eight times a month	0	0	0	0.0
(f) Not checked	6	1*	4	36.7
52. Regularly scheduled group conferences involving all student teachers and all supervising (critic) teachers should be conducted:				
(a) Once a month	3	4	5†	36.7
(b) Twice a month	1	2	0	16.7
(c) Three times a month	0	0	0	0.0
(d) Four times a month	0	1	2	10.0
(e) Eight times a month	0	0	0	0.0
(f) Not checked	6	3	3	36.7

* One director would have such a conference at the beginning of each semester.

† One of these principals would have such a conference less often than once a month, and another would not include students.

CHAPTER VI

ORGANIZATION AND INTERPRETATION OF ADMINISTRATIVE GUIDES

IT was obviously impossible to arrange the tentative administrative guides in relation to each other in the previous chapter because of the mechanics involved in checking the various items and sub-items. It is the purpose of this chapter to summarize in organized form the results of the evaluation of the proposed administrative guides. Such interpretation will be attempted as seems necessary for a full understanding of a particular administrative guide or its relation to other guides. The material will be organized in a general way with reference to (a) the laboratory school system, (b) the university high school, and (c) the cooperating public school. It will be evident that many of the guides discussed under the university high school would be applicable also to the cooperating public school used for teacher training purposes. Under the caption, *Cooperating Public Schools*, will be discussed only those guides which concern the administration of public schools in connection with the teacher training program.

Throughout this chapter, reference is made consistently to the table in the preceding chapter in which the tabulated administrative guides are numbered from 1 to 52. Wherever reference needs to be made, the number of the item or sub-item is inserted parenthetically. For example, (24) would refer to Item 24 in the tabulation, including the sub-item, whereas, (1c) would refer to Sub-item (c) under Item 1.

THE LABORATORY SCHOOL SYSTEM

Under ideal conditions, the laboratory school immediately associated with the teacher training program should be on or near the campus and controlled by the university (1a). This type of school will be discussed later as the university high school. The campus school should be supplemented by one or more off-campus schools closely affiliated with the university (1b) for the purpose of furnishing additional directed teaching facilities (36) under more typical conditions (24). Those institutions which train administrators and supervisors should secure the cooperation of a number of additional public schools in the training of these prospective officials (1c). A laboratory school system should also provide for experimentation (1d) and demonstration (1e) in a university controlled school. The vote of the jury, due to the arrangement of the check-list, does not

indicate whether or not it is desirable to provide for these functions in schools separate from those in which directed teaching is done.¹ The general approval of these functions for the university high school (2) seems to indicate that separate schools are not intended. This assumption is in accord with practice since no state university has more than one campus school on the secondary level.

THE UNIVERSITY HIGH SCHOOL

The university high school and its administration will be discussed in terms of evaluated administrative guides under the following headings: (1) function, (2) administrative procedure, (3) the principal, (4) teaching personnel, (5) pupil personnel, (6) curricular and extra-curricular activities, and (7) building and facilities.

Function.—The university high school should provide facilities for observation, participation and directed teaching in relation to the student teaching program and observation opportunities in relation to education courses. In the university high school should be demonstrated good practice in administration, supervision and teaching; facilities for controlled educational studies should be provided; and finally, the university high school should assume as one of its functions the mobilization, evaluation and distribution of information concerning curricula, methods and other pertinent educational matters (2). Perhaps, it should be stated that when the administrative guides were formulated, it was assumed that every university high school would consider the educational progress of the pupils enrolled its first concern. Since no question was raised on this point by any member of the evaluating committee, it is evident that they were in accord with this assumption.

Administrative Procedure.—Under this caption will be considered (a) administrative organization, (b) inter-departmental and public relations, (c) pupil accounting and records, and (d) clerical assistance.

(a) Organization.—The varied functions of the university high school make desirable some sort of organization for the proper co-ordination of these functions. However, the evaluation of the tentative administrative guides fails to show decisive superiority of one type of organization over the others (42). It is clear, nevertheless, that we can reject the proposal to make the principal subordinate to the supervisor of directed teaching, or to make the supervisor of

¹For comments on this point by jurors, see p. 107.

directed teaching subordinate to the principal in those institutions which have both of these officials. We have divided opinion with respect to the following proposed guides as a means of coordinating the more or less unrelated activities of the university high school: (a) by combining into one office the principalship of the high school and the supervisorship of directed teaching, (b) by setting up a coordinating committee including the dean, the principal and the supervisor of directed teaching, and (c) by centering the responsibility for the coordination of these functions in the dean of the education department. In the case of these three proposed guides, slight preference was shown in the order given here.

Another matter of great importance is that of determination of high school policies. It is apparent (43) that the final responsibility for this should rest with the dean of the education department (assuming, of course, that opinions of teachers and others concerned will be considered).

Where education departments have both a principal of the university high school and a supervisor of directed teaching, although we should not make one subordinate to the other (43), the problem of overlapping duties still remains. Opinion of the evaluating committee is divided on the question as to which of these officials should be responsible for curriculum policies in the university high school (44A) or the supervision of subject-matter (44B). That portion of the committee composed of principals favor placing these responsibilities on the principal of the university high school, but in case of the other two groups, opinion is evenly divided. This seems to indicate that these responsibilities would need to be placed in light of the qualifications and other duties of these officials, and in light of other features of the administrative organization.

There is perfect agreement in each group of the committee that the responsibility for matters of university high school administration (aside from curriculum development and subject-matter supervision) should rest with the principal (44A).

Because the functions of the university high school require a personnel with greatly varying interests, the duties of each member of the immediate staff and the duties (with respect to the high school) of each individual indirectly associated with the university high school should be clearly defined (7).

(b) Inter-departmental and Public Relations.—Some provision should be made for achieving an inter-relationship between the university high school, the education department and related depart-

ments of the liberal arts college (12). This is attempted in some places by having the heads of subject-matter departments of the high school teach classes also in the school or college of education, and even in the college of liberal arts.

Not only is it essential that pleasant and adequate working relationships be maintained with other departments of the university, but a public relations program should be maintained (3) involving a conscious attempt to inform the people of the state with respect to the functions of the university high school and its contributions to the state; to inform school administrators and secondary school teachers of the state with respect to the services offered by the university high school; to inform the local community with respect to its functions, its relation to the community and its advantages to the community; and to maintain pleasant relations with local public schools and the local community generally.

(c) Pupil Accounting and Records.—The functions of a university high school over and above those of a public high school necessitate a comprehensive system of records and pupil accounting (13).

(d) Clerical Assistance.—If the functions of a university high school are to be realized, the clerical work will be heavier than that of the public high school. The administrative organization should at least provide clerical assistance sufficient for the following purposes (14): to keep adequate records, to handle routine matters in the principal's office, to do stenographic work involved in the administration of the school, to relieve teachers of routine clerical work, to assist department heads with professional correspondence, to assist teachers with professional correspondence, and to provide technical assistance in connection with statistical studies.

The Principal.—In considering the principalship of the university high school in comparison with the principalship of the public high school, the matters of chief concern seem to be the qualifications of the principal and his official status.

(a) Qualifications.—In addition to other qualifications usually required of a good high school principal, the principal of a university high school should possess the following qualifications (8): the quality of cordial cooperation, efficiency in handling public relations problems, efficiency in personnel management, knowledge of the philosophy underlying teacher training activities, familiarity with recognized procedure in teacher training, successful experience as a high school principal, academic and professional training equivalent

to that of other members of the education department staff, and familiarity with school conditions and school needs of the state.

(b) Official Status.—The principal should be directly responsible to the director of teacher training (if different from the supervisor of directed teaching) or to the dean of the education department (41a, b). He should not be directly responsible to the supervisor of directed teaching (41c, 42d).

The principal, along with the supervisor of directed teaching, should be eligible for the privileges, rank and pay enjoyed by other members of the education department staff (4a, b). Such eligibility, of course, assumes the necessary qualifications.

Teaching Personnel.—Those matters which seem most significant with respect to the teachers in university high schools are selection, qualifications, teaching load and official status. These will be discussed in light of the evaluated administrative guides.

(a) Selection.—While the final responsibility for the selection of teachers should rest with the dean (10), those under whom the teachers must work should have a voice in their selection (9). Each of the following individuals should have a part in the selection of teachers: the head of the department concerned, the supervisor of directed teaching, the principal, the director of teacher training (if different from the principal and supervisor of directed teaching), and the dean of the education department.

(b) Qualifications.—The nature of the work of the university high school, or any laboratory school used for teacher training purposes, makes it desirable for the teachers of such schools to have, not only academic and professional training of a superior nature, but also a constructive attitude in relation to the functions of the school (23). More specifically, the supervising or critic teacher should have the following qualifications: a master's degree or equivalent with major emphasis on the subject which he teaches, a knowledge of the philosophy underlying modern teaching methods and educational activities, an understanding of the philosophy underlying principles of supervision, successful teaching experience, a disposition to influence constructively the educational activities of the state within his particular field, the attitude of an educational pioneer, and a spirit restless in its search for improvement of present practices. Nor should the administration be content with the selection of highly qualified teachers. A program of in-service training should be provided in relation to both pupil instruction and student teacher supervision (29).

(c) *Teaching Load*.—It is agreed by a significant majority of the evaluating committee that the teaching load of the supervising (critic) teacher should be so reduced in amount and variety as to permit an adequate schedule of conferences with student teachers; extensive preparation for classes; investigations, under expert direction, of delimited problems affecting pupil instruction or teacher training; independent research; and advanced study (28). It should be noted, however, that the last two activities were approved by only 56.7 and 60.0 per cent of the committee, respectively, whereas the other activities were approved by 86.7 to 96.7 per cent as a justification for reducing the teaching load.

(d) *Official Status*.—With the exception of one principal, the jurors indicated that recognition and rewards of supervising or critic teachers should be great enough to attract the best teachers (30). Exactly half of the committee would have such teachers eligible for the same privileges, rank and pay as are enjoyed by the other members of the education department staff (11*d*); however, 19 of the 30 members would advocate such privileges, rank and pay for heads of high school departments (11*c*).

Pupil Personnel.—The student body, with respect to types of pupils, should be typical of a public school group (24). Not one of the 30 jurors favored a select group and only one advocated a large number of problem cases.

Curricular and Extra-Curricular Activities.—Curricular and extra-curricular activities of a laboratory school should represent in practice that which is most generally accepted in theory (25). This does not mean that the trying out of new activities, methods, etc. should be forbidden, but rather that the activities should not be influenced by tradition. For that very reason, laboratory schools should be free to try out those theories which seem to offer improvement in the educational outcome, and should not be bound by state regulations with respect to organization of the school, curricula or text-books (27).

When considering curricular activities from the standpoint of classroom methods, the evaluating jury indicates that the methods of instruction in a university high school should not be definitely influenced by a single instructional pattern (45). However, they are evenly divided with respect to two other criteria. One of the criteria on which opinion is divided, is that the methods of instruction should be varied systematically for the purpose of giving prospective teachers a background for evaluating in an open minded

way the methods receiving emphasis in a given system. The other is that the methods of instruction should be influenced by only one criterion; namely, results measured in terms of pupil achievement. This seems to indicate that while it is advisable to vary the methods of instruction for the sake of the student teacher, it would not be desirable if such variation was at the expense of pupil achievement.

Student Teaching and Related Problems.—The administrative guides which are directly concerned with student teaching may be brought together under the following captions: (a) selection, (b) procedure, (c) extent of training, (d) credit, and (e) student teaching in the summer session. It will be noted that these administrative guides are applicable in the cooperating public school used for teacher training purposes as well as in the university high school.

(a) Selection.—Although efforts to establish reliable standards as an aid in the selection of prospective teachers have been disappointing up to the present time, those responsible for evaluating the administrative guides, with the exception of one principal, were of one mind in indicating that for the sake of pupil welfare, the student teacher, and the teaching profession, teacher training officials should make a consistent effort to discover standards whereby prospective teachers may be more highly selected (31).

(b) Procedure.—The aim of the program of student observation, participation, and directed teaching should be, as indicated by the committee, to insure a tolerable degree of immediate teaching skill and a basis for future growth in the teaching service (27). The weight of preference in favor of this as an aim was very marked. The other two aims presented for evaluation were: (a) to insure immediate success on the part of the beginning teacher, and (b) to give the student an appreciation of the principles of correct practice as a basis of growth in the teaching service. The former was received with least favor of the three proposed principles. It is evident that the teacher training program in state universities is not to be regarded as a procedure for developing teaching tricks.

Such a philosophy with respect to the purpose of student teaching implies that observation, participation and directed teaching should be accompanied by a systematic effort to integrate theory and practice (35) which in turn would require that such activities be directed in accordance with a well defined program (34). According to the evaluating committee, these may be accepted as worthy administrative guides.

Because of the influence of special methods courses in the inte-

gration of theory and practice, it is interesting to note that the jury almost unanimously oppose having the special methods courses follow student teaching, although, there is a sharp division of opinion as to whether such courses should precede or parallel student teaching (46).

The teacher-student conference is undoubtedly one of the most potent influences in the realization of the aim of the student teaching program. Five types of regularly scheduled conferences were approved by the evaluating committee (48-52). By referring to Table XLI, Part III, it will be noted that 80 per cent of the committee advocate individual conferences between the student teacher and the supervising teacher and that a majority of those favoring this type of conference would have it conducted at least twice each week (48); that 70 per cent favor group conferences between student teachers and supervising teachers, and that a majority of those favoring such a conference would have it conducted at least once each week (49); that 83.3 per cent favor group conferences involving all student teachers in a given subject-matter field, and that a majority of those favoring this type of conference would have it conducted at least twice each month (50); that 63.3 per cent favor group conferences involving all student teachers of all subject-matter fields, and that a majority of those in favor of such a conference would have it conducted at least once a month (51); that 63.3 per cent of the committee advocate group conferences involving all student teachers and all supervising teachers, and that a majority of those favoring this type of conference would have it conducted at least once a month (52).

(c) *Extent of Training.*—Not only is it desirable to have student teachers do directed teaching in both major and minor subjects (32), but, so far as possible, provision should be made for student observation and participation in those activities, in addition to directed teaching, which the beginning teacher may be expected to direct (33). It is also advocated that, after completion of a course in observation, participation and directed teaching, the prospective teacher should have the opportunity of assuming, for a period, full control of a class in a typical public high school situation with full responsibility for the results obtained before a permanent certificate is awarded (36). Thus we find advocated extension of the training of the prospective teacher at three important points.

(d) *Credit.*—College credit allowed for observation, participation and directed teaching should be commensurate with the time

and effort required and determined by the same standards as credit for academic and laboratory work of the traditional type (37).

(e) The Summer Session.—With only one dissenting voice out of 30, the evaluating committee accepted the statement that laboratory school facilities for students of the summer session should not be inferior to those of the regular session.

Building and Facilities.—The formulation and evaluation of administrative guides concerning the university high school building were limited to (a) location, (b) size, and (c) type (with respect to function) of the building, and (d) provision for demonstration, and (e) conferences.

(a) Location.—According to the ratings by the evaluating jury, the order of importance of the criteria to be considered in the location of the university high school building (aside from the consideration of available space and money) are as follows (38): accessibility to student teachers and student observers; accessibility to pupils; the type of pupil desired; accessibility to education department teachers; and landscaping possibilities. The figures in Part II of the preceding table show that the first two of these criteria may be considered of approximately equal value and that the third and fourth are of approximately equal value. It is apparent, however, that very little significance is attached to *landscaping possibilities*.

(b) Size.—The following criteria for determining the size of a university high school are given in order of importance according to the rankings of the jury (39): probable future need; facilities available for directed teaching through cooperative arrangements; pupils available; and present need. It is significant that *probable future need* is rated as very important and that *present need* is given a relatively low rating. The other two proposed criteria come about midway between these in relative importance and are considered of approximately equal value.

(c) Type.—Beyond the requirements for efficient instruction of pupils and efficient supervision of student teaching, it is clearly indicated that an attempt should be made to have the university high school building a model rather than a typical high school building (40). Between these two extremes, according to the ranking of these criteria, would be a building to meet the immediate peculiar needs for teacher training without regard for the similarity or dissimilarity to public school conditions.

(d) Demonstration Rooms.—Just one more than half of the committee would have the building plans for a university high school

include, for the purpose of group demonstration and observation, one or more large rooms with galleries sufficient to seat large classes of students in methods and other education courses, and one or more large rooms without galleries (5). Of the three groups, a majority of the directors only favor one or more rooms that may be enlarged by folding partitions.

(e) Conference Rooms.—At least one conference room should be provided for every two class rooms (6). Slightly less than half of the evaluating committee advocate a conference room for each class room. In view of these facts and other evidence, the writer believes that the time is rapidly coming when ample provision for conference rooms will be considered second in importance only to provision for class rooms.

COOPERATING PUBLIC SCHOOLS

In addition to those administrative guides discussed under the general heading of the university high school which are obviously applicable to the administration of cooperating schools used for directed teaching purposes, as, for example, those having to do with teacher qualifications or student teaching problems, we are concerned with those administrative guides dealing with adequate and pleasant working relationships between state universities and cooperating schools and the official status of the cooperating personnel.

Cooperative Relationships.—Provision for cooperative relationships between teacher training institutions and public schools should be clearly defined in a written contract (16). Such provisions should guarantee to the public schools educational outcomes equal or superior to those formerly achieved, and final authority to public school officials in all matters affecting the welfare of the pupils (15a). Such provisions should guarantee to the teacher training institution the right to do enough supervision to assure the growth of the student teachers and the pupils (15b).

The expense to the community incident to the operation of one or more cooperating laboratory schools should not exceed the expenditure normally required for such a school or schools (17); and the advantages to the community of the cooperative arrangements should be evident to the community (18). To this end, the university and the public school authorities should foster a well directed public relations program for the purpose of keeping the community informed with respect to the advantages offered by the cooperative program (19).

Cooperative Personnel.—There is very little inclination on the part of the evaluating committee to approve the proposed policy of having the university recognize the official relationship of the superintendent of the cooperating school system to the teacher training program, either by allowing college rank, by subsidizing his salary, or by making him a teacher in the education department (20). The same may be said concerning the principal of the cooperating high school except that a significant portion of the committee, though less than half, advocate subsidizing his salary (21).

The selection of supervising (critic) teachers for the cooperating public schools seems to be a matter about which opinion is divided (22). However, weight of opinion is in favor of the policy of selection by the university with the approval of the public schools, rather than selection by the public schools with the approval of the university, or the selection by the university from the high school staff already employed.

Other Administrative Guides.—Certain sections of this chapter which appear as part of the discussion of the university high school are likewise applicable to the administration of the cooperating school used for directed teaching purposes. These sections appear under the following headings: *Teaching Personnel*, with the exception of the paragraph dealing with *Selection*; *Pupil Personnel*; *Curricular and Extra-curricular Activities*; and *Student Teaching and Related Problems*.

APPENDIXES

APPENDIX A

STATE UNIVERSITIES AND OTHER INSTITUTIONS

INCLUDED IN THIS STUDY

- University of Alabama, University, Alabama.
- University of Arizona, Tucson, Arizona.
- *University of Arkansas, Fayetteville, Arkansas.
- University of California, Berkeley, California.
- University of California, Los Angeles, California.
- University of Colorado, Boulder, Colorado.
- University of Delaware, New Ark, Delaware.
- University of Florida, Gainesville, Florida.
- University of Georgia, Athens, Georgia.
- University of Idaho, Moscow, Idaho.
- *University of Illinois, Urbana, Illinois.
- Indiana University, Bloomington, Indiana.
- *State University of Iowa, Iowa City, Iowa.
- *University of Kansas, Lawrence, Kansas.
- *University of Kentucky, Lexington, Kentucky.
- *Louisiana State University, Baton Rouge, Louisiana.
- University of Maine, Orono, Maine.
- University of Maryland, College Park, Maryland.
- *Miami University, Oxford, Ohio.
- *University of Michigan, Ann Arbor, Michigan.
- *University of Minnesota, Minneapolis, Minnesota.
- *University of Mississippi, Oxford, Mississippi.
- *University of Missouri, Columbia, Missouri.
- State University of Montana, Missoula, Montana.
- *University of Nebraska, Lincoln, Nebraska.
- State University of Nevada, Reno, Nevada.
- University of New Hampshire, Durham, New Hampshire.
- University of New Mexico, Albuquerque, New Mexico.
- University of North Carolina, Chapel Hill, North Carolina.
- *University of North Dakota, University, North Dakota.
- Ohio State University, Columbus, Ohio.
- Ohio University, Athens, Ohio.
- *University of Oklahoma, Norman, Oklahoma.
- *University of Oregon, Eugene, Oregon.
- Pennsylvania State College, State College, Pennsylvania.
- Purdue University, LaFayette, Indiana.
- University of South Carolina, Columbia, South Carolina.
- *South Dakota University, Vermillion, South Dakota.
- University of Tennessee, Knoxville, Tennessee.
- University of Texas, Austin, Texas.
- University of Utah, Salt Lake City, Utah.
- University of Virginia, Charlottesville, Virginia.
- University of Vermont, Burlington, Vermont.
- Washington State College, Pullman, Washington.
- University of Washington, Seattle, Washington.
- *West Virginia University, Morgantown, West Virginia.
- *College of William and Mary, Williamsburg, Virginia.
- *University of Wisconsin, Madison, Wisconsin.
- *University of Wyoming, Laramie, Wyoming.

* Operates a university high school.

UNIVERSITY HIGH SCHOOLS CONNECTED WITH STATE UNIVERSITIES

University Training School, Fayetteville, Arkansas.
 University High School, Urbana, Illinois.
 University High School, Iowa City, Iowa.
 Oread Training School, Lawrence, Kansas.
 University High School, Lexington, Kentucky.
 University Demonstration School, Baton Rouge, Louisiana.
 University High School, Ann Arbor, Michigan.
 University High School, Minneapolis, Minnesota.
 University High School, Oxford, Mississippi.
 University High School, Columbia, Missouri.
 Teachers College High School, Lincoln, Nebraska.
 University High School, Grand Forks, North Dakota.
 William McGuffey High School, Oxford, Ohio.
 University High School, Norman, Oklahoma.
 University High School, Eugene, Oregon.
 University High School, Vermillion, South Dakota.
 Mathew Whaley School, Williamsburg, Virginia.
 University High School, Morgantown, West Virginia.
 Wisconsin High School, Madison, Wisconsin.
 Secondary Training School, Laramie, Wyoming.

 PUBLIC HIGH SCHOOLS LOCATED NEAR STATE UNIVERSITIES WITH
 WHICH UNIVERSITY HIGH SCHOOLS WERE COMPARED
 IN CHAPTER IV

Public High School, Fayetteville, Arkansas.
 Urbana High School, Urbana, Illinois.
 Iowa City High School, Iowa City, Iowa.
 Liberty Memorial High School, Lawrence, Kansas.
 Henry Clay High School, Lexington, Kentucky.
 Ann Arbor High School, Ann Arbor, Michigan.
 Central High School, Minneapolis, Minnesota.
 David H. Hickman High School, Columbia, Missouri.
 Jackson High School, Lincoln, Nebraska.
 Central High School, Grand Forks, North Dakota.
 Eaton High School, Eaton, Ohio.
 Public High School, Norman, Oklahoma.
 Eugene High School, Eugene, Oregon.
 Public High School, Vermillion, South Dakota.
 Suffolk High School, Suffolk, Virginia.
 Morgantown High School, Morgantown, West Virginia.
 Central High School, Madison, Wisconsin.
 Laramie High School, Laramie, Wyoming.

APPENDIX B

A STUDY OF LABORATORY SCHOOLS CONNECTED WITH DEPARTMENTS,
SCHOOLS AND COLLEGES OF EDUCATION IN STATE
UNIVERSITIES AND COLLEGES

Directions and explanations: When the questionnaire has been filled out, please return in the self-addressed envelope to A. M. Jarman, 1228 Prospect St., Ann Arbor, Michigan.

Where you cannot give the exact data with the information you have at hand, make as close an estimation as possible. If a question is not quite clear, furnish the information in accordance with your interpretation rather than omit it.

In this questionnaire, the information requested concerns the college owned and controlled school on the secondary level unless otherwise specified.

The term "laboratory school" refers to any school used by the education department for observation, practice teaching, etc.

Where the term "education department" is used, the reference is to the department, school, or college of education connected with the university.

Name of University

.....

1. What provision does your institution make for laboratory school facilities below the secondary school level?

(check here)

-a. School on or near campus owned and controlled by college.
-b. Arrangement with public school authorities for one or more township or county schools.
-c. Arrangement with public school authorities for use of city elementary schools.

2. What provision does your institution make for laboratory school facilities on the secondary school level?

(check here)

-a. College owned and controlled school on or near campus.
-b. Arrangement with public school authorities for use of one or more township or county high schools.
-c. Arrangement with public school authorities for use of city high school.

3. Considering all things in light of your experience and observation, would you prefer for the use of your institution

(check here)

-a. A college-owned and controlled high school?
-b. A public high school?
-c. An arrangement for the use of both college owned and public?

4. To whom is the University High School Principal responsible?

(check here)

-a. Dean or head of department of education.
 -b. Professor of secondary education.
 -c. Supervisor of directed teaching.
 -d.
-

5. Who sets up regulations under which the university high school operates?

(check here)

-a. Governing board of the university.
-b. Dean or head of department of education.

-c. Faculty of department of education.
-d.

6. Who is responsible for determining high school policies?

(check here)

-a. Principal of the high school.
-b. Faculty of the high school.
-c. Supervisor of directed teaching.
-d. Faculty of department of education.
-e. Dean or head of department of education.
-f. Professor of secondary education.
-g.

7. Who selects teachers for the University High School?

Who elects them?

8. What is the highest rank that may be attained by the head of a department in the high school?

9. Does the department head teach one or more classes in the department of education? In the liberal arts college?

10. What is the highest rank that may be attained by a teacher in the University High School?

How many teachers, other than department heads, teach one or more classes in the department of education?
In the liberal arts college?

11. Is eligibility for the same privileges, rank and pay which is enjoyed by other members of the staff of the department of education accorded to the high school principal?
The supervisor of directed teaching?

12. Please indicate by check (X) the policy of your institution concerning tenure of each personnel type listed below

	Permanent Tenure	Indefinite Tenure	Elected Annually
a. Supervisor of directed teaching			
b. Principal of the high school ..			
c. Heads of departments			
d. Critic teachers			
e. Other teachers			

13. How many of the teachers are doing critic work?

14. How many peirods per week does each department head teach in the high school?

15. How many periods per week does the principal teach in the high school? In the department of education?.....

16. What is the present value, approximately, of buildings and permanent equip-ment used by the high school?

17. For current expenses of the university high school for the present year, how

- much does your budget provide for salaries and part salaries?.....
 Other expenses?
18. Does the high school have a budget separate from the department of education?..... Who is responsible for preparing the high school budget?
 19. If the building in which the high school is located is not used solely for high school purposes, approximately what part is so used?.....
 20. Is the building so located that student teachers can reach it in the time allowed for the change of classes?.....
 21. Is it within reasonable walking distance of most of the pupils who attend? For what part of the high school pupils do you provide transportation?
 22. As a whole, are the facilities of your laboratory school equal or superior to those of the high school in the community from which you draw pupils?
 23. Does the college owned and controlled system of laboratory schools provide for a nursery school?..... Primary school?..... Elementary school?.....
 24. Is the high school principal also principal of the other schools? If not, who coordinates the work of the different divisions?.....
 25. What is the length of the school day, excluding the lunch period?.....
 26. What is the I.Q. of the average pupil in the university high school?..... If this information is not available, do you consider the pupils in the university high school a more select group than those in the neighboring high school?.....
 27. Do you have difficulty enrolling a sufficient number of pupils in the university high school?..... Do you have a waiting list?..... If so, on what basis do you select your pupils?
 28. Are you required to use the state adopted curricula in the university high school? Texts?
 29. How many student teachers are doing and will do directed teaching in the university high school this year?.....
 30. How many student teachers are permitted in any one class for observation? Directed teaching?
 31. How many student teachers may be assigned to a critic teacher for a semester?
 32. How many hours must a student have had of an academic subject before being permitted to teach it?.....Is a student teacher permitted to teach in any other subject matter field than her major? Major or minor?
 33. Is the teacher required to teach in more than one subject specialty?..... Observe in more than one?.....
 34. The average high school pupil is taught approximately what part of the semester by a student teacher?

35. Has any attempt been made to determine the efficiency of instruction in the high school by means of standardized tests?..... What did the tests show as to the general efficiency of instruction?
36. Who assigns student teachers to their directed teaching positions?
37. Is the student teacher required to take an examination on the subject to be taught before teaching it?..... A comprehensive examination?.....
38. How often do critic teachers have definitely scheduled conferences with student teachers?
39. Is the University High School open during the summer?.....
How long? Is it used for observations, directed teaching, or both?..... Is the same teaching staff used in the summer as in the regular session?.....
40. Are the same directed teaching standards maintained in the summer session as in the regular session?
41. How many experiments or research studies have been conducted in connection with the University High School by teachers or graduate students within the last two years which could not have been done with the same success in connection with a cooperating public school?
42. What part of your student teachers do their practice teaching in cooperating public schools?
43. Would you like to have a summary of this study when it is completed?
Signature..... Position.....

Any printed matter concerning the University High School and teacher training activities that you may send me will be greatly appreciated.

Remarks:

A STUDY OF LABORATORY SCHOOLS CONNECTED WITH DEPARTMENTS, SCHOOLS, AND COLLEGES OF EDUCATION IN STATE UNIVERSITIES

Directions and explanations: When the questionnaire has been filled out, please return in the self-addressed envelope to A. M. Jarman, 1228 Prospect St., Ann Arbor, Mich.

Where you cannot give the exact data requested with the information you have at hand, make as close an estimate as possible. If a question is not quite clear to you, furnish the information in accordance with your interpretation of it rather than omit it.

The term "laboratory school" refers to any school used by the department of education for observation, practice teaching, etc.

Name of University

Signature Position

1. How many students do you have enrolled this year who are doing and who expect to do directed teaching in the elementary grades?
In high school grades or subjects?
2. What provision does your institution make for laboratory school facilities on the elementary level?
(check here)
.....a. School owned and controlled by the university.

-b. Arrangement with public school authorities for use of one or more county or township schools.
-c. Arrangement with public school authorities for use of one or more city schools.
-d.
- 3. What provision is made for laboratory school facilities on the secondary school level?
(check here)
 -a. High school owned and controlled by the university.
 -b. Arrangement with public school authorities for use of one or more county or township high schools.
 -c. Arrangement for use of city high school.
 -d.
- 4. For how long a term is your contract with the public school authorities?
- 5. How many teachers are doing critic or supervising work in the high school or schools?
- 6. How many of these hold the Bachelor's degree, or the equivalent?.....
Master's degree, or equivalent? Ph.D.
- 7. Approximately, what part of the critic teacher's salary is paid by the college?
- 8. What college rank is held by the critic teacher?.....
- 9. On the average, how many periods per week is the critic teacher on duty, aside from conferences, in the high school?
- 10. How often do critic teachers have regularly scheduled conferences with student teachers?
- 11. Who selects the critic teachers?
- 12. Does the University subsidize the salary of the principal of the cooperating school? Approximately what per cent?.....
What college rank does the principal hold?
- 13. What part of the superintendent's salary is paid by the University?
..... What college rank does he hold?.....
- 14. Who supervises the directed teaching work of the critic teachers in the high school?
- 15. Does the school board have a voice in the selection of the individual, or individuals, who supervises the directed teaching?
Does he supervise the work of any teachers besides the critic teachers?
.....
- 16. Who assigns the student teachers to their work in the public schools for directed teaching?
- 17. How many students may be assigned to a critic teacher for a single class period? How many student teachers may be assigned to a critic teacher for a semester?.....
- 18. What amount of money is appropriated by the University for supplementary materials, standardized tests, etc., for use in connection with the training

- school work? \$..... How much
by the school board for the same purpose? \$.....
19. Do you have any difficulty maintaining pleasant and adequate working relations with the public schools?
 20. Approximately, what is the average time consumed by a student going to and returning from directed teaching? (This is not to include time in class)
 21. For what amount does your budget provide for transportation of student teachers this year?
 22. Does your institution collect a transportation fee from student teachers? How much per student?
 23. What is the total expense of all activities connected with directed teaching in the public schools (including the college's share of the salaries of the supervisor of directed teaching, critic teachers, principal and superintendent, additional supplies, transportation and other activities that would not be necessary if you did not have student teaching)? \$.....
 24. Is the cooperating high school required to use the curricula adopted by the State?..... Text books?..... If not, does the department of education have a voice in the development of the high school curricula? In the selection of the texts?.....
 25. Are high school facilities available for observation and directed teaching during the summer session?
 26. Are the same directed teaching standards maintained during the summer session as during the regular session?
 27. Do you have the privilege of conducting experiments in connection with the cooperating public schools?

COPY OF LETTER WHICH ACCOMPANIED QUESTIONNAIRE TO STATE
UNIVERSITY OFFICIALS

My dear Sir:

Under the direction of Dr. George E. Carrothers, University of Michigan, I am making a study of laboratory schools connected with departments, schools and colleges of education in state universities. While I expect to make this study the basis of my dissertation, our program of expansion of laboratory school facilities at the University of Virginia, with which I am connected, will be influenced by the results of the study.

I am gathering data from several sources, but some of the most important information can be had only from those in the field. I am visiting about 25 per cent of the state universities at my expense. Since I cannot visit all of them, I shall be very grateful to you if you will kindly fill out the inclosed questionnaire for me. One of the copies of the questionnaire is for your own files.

I assure you that the data will be used in such a way as to avoid embarrassment to any individual or institution concerned.

If you will so indicate, I shall be glad to send you a copy of the summary of my study when it is completed.

Assuring you of my gratitude for your cooperation in this project, I am

Very truly yours,

(Signed) A. M. JARMAN

COPY OF QUESTIONNAIRE WHICH WAS MAILED TO SUPERINTENDENTS
OF 37 PUBLIC SCHOOL SYSTEMS IN WHICH STUDENT TEACHING HAD
RECENTLY BEEN DONE

My dear Sir:

Under the direction of Dr. Raleigh Schorling, University of Michigan, I am making a study of training school facilities connected with education departments of state supported universities and colleges. Our program of expansion of training school facilities at the University of Virginia, with which I am connected, will be influenced by the results of this study. I am quite sure that those superintendents who have had, or now have, one or more of their schools used by a college or university for observation, participation, or practice teaching are in a position to make a valuable contribution to this study. It is because I value your opinion in this matter that I request the information indicated below. I assure you that I shall not use the name of any individual, place, or institution in connection with this part of the study.

Will you kindly check the questions below in accordance with your observation and experience, and return this form to me in the enclosed self-addressed envelope?

1. Has the teacher training program in connection with your school system influenced the morale of your administrative and supervisory staff (a) favorably?..... (b) unfavorably?.....
2. Has the morale of your teaching staff been influenced (a) favorably?..... (b) unfavorably?.....
3. Has the efficiency of instruction been influenced (a) favorably?..... (b) unfavorably?.....
4. As a whole, does public opinion favor practice teaching in your schools?.....

I shall be very glad to have any further comment on the problems which one might expect to meet in working out a satisfactory cooperative arrangement between public school authorities and college authorities for teacher training facilities.

I shall be very grateful for your cooperation.

Very truly yours,

(Signed) A. M. JARMAN

APPENDIX C

GUIDING PRINCIPLES FOR THE ADMINISTRATION OF LABORATORY
SCHOOLS CONNECTED WITH EDUCATION DEPARTMENTS
OF STATE UNIVERSITIES

Explanations: The term, "laboratory school," as used below is meant to include any school used in connection with the teacher training program of a state university.

The term, "university high school," will be used when reference is made to the college controlled, or campus high school.

"Cooperating school," as used below refers to the public school in which the state university has teacher training privileges.

The term, "education department," will be used when reference is made to department, school, or college of education of a state university.

The term, "participation," as used below will refer to those student activities which usually precede the teaching act on part of the student teacher.

It is intended that these principles shall apply to the administration of laboratory schools on the secondary school level.

Directions: Please check each item below which seems to you sufficiently important to be accepted as a guiding principle in the administration of laboratory schools.

Where the item is subdivided, each part should be considered and checked separately. Assume ideal conditions in checking each item unless the conditions are stated.

Remarks on any item, or the statement of any principle which has been omitted will be appreciated.

When checking is completed, please return one copy of these tentative principles to A. M. Jarman, 1228 Prospect St., Ann Arbor, Michigan.

Checked by

Address

1. A system of laboratory schools should include:
 -(a) A school on or near the campus controlled by the university to be used for teacher training purposes.
 -(b) One or more off-campus schools closely affiliated with the university for the purpose of furnishing additional directed teaching facilities under more typical conditions.
 -(c) A number of additional cooperating public schools to be used as an aid in the training of administrators and supervisors.
 -(d) A university controlled school for experimental purposes.
 -(e) A university controlled school for demonstration purposes.
2. The university high school should recognize the following functions:
 -(a) To provide facilities for observation, participation, and directed teaching.
 -(b) To provide facilities for controlled educational studies.
 -(c) To provide observation opportunities in relation to education courses.
 -(d) To demonstrate good practice in administration, supervision, and teaching.
 -(e) To mobilize, evaluate and distribute information concerning curricula, methods, and other pertinent educational issues.
 -(f)
3. The university high school should foster a public relations program involving a conscious attempt
 -(a) To inform the people of the state with respect to its functions and its contributions to the state.
 -(b) To inform school administrators and secondary school teachers of the state with respect to the services offered by the university high school.

(Check here)

-(c) To inform the local community with respect to its function, its relation to the community and its advantages to the community.
 -(d) To maintain pleasant relations with local public schools and the local community generally.
4. Frequency of visits and the varying interests of visitors to the university high school makes necessary a well planned program for handling callers in order that the best interests of the school and visitorsmay be served.
5. In addition to the usual facilities of a public high school, the building plans for a university high school should include facilities for group demonstration and observation by providing
-(a) One or more large rooms with galleries sufficient to seat large classes of students in methods and other education courses.
 -(b) One or more large rooms without galleries.
 -(c) One or more rooms that may be enlarged by folding partitions.
 -(d)
6. In addition to the usual facilities of a public high school, the building plans for a university high school should provide
-(a) One conference room for each class room.
 -(b) One conference room for every two class rooms.
 -(c) One conference room for every three class rooms.
 -(d) One conference room for every four class rooms.
7. The duties of each member of the university high school staff and the duties (with respect to the high school) of each individual indirectly associated with the university high school should be clearly de-
.....fined.
8. In addition to other qualifications usually required of a good high school principal, the principal of a university high school should possess the following qualifications:
-(a) The quality of cordial cooperation.
 -(b) Efficiency in handling public relations problems.
 -(c) Efficiency in personnel management.
 -(d) Knowledge of philosophy underlying teacher training activities.
 -(e) Familiarity with recognized procedure in teacher training.
 -(f) Successful experience as a high school principal.
 -(g) Academic and professional training equivalent to that of other members of the education department staff.
 -(h) Familiarity with school conditions and school needs of the state.
9. In the selection of teachers for the university high school, the following individuals should have a voice:
-(a) Dean of the education department.
 -(b) Director of teacher training (if different from principal and supervisor of directed teaching).
 -(c) Principal.
 -(d) Supervisor of directed teaching.
 -(e) Head of the high school department concerned.
10. Final responsibility for selection (not election) of teaching personnel in the university high school should rest with
-(a) Dean of the education department.

(Check here)

-(b) Director of teacher training.
 -(c) Supervisor of directed teaching.
 -(d) Principal.
 -(e) Head of the high school department concerned.
11. Eligibility for the privileges, rank, and pay enjoyed by other members of the education department staff should be accorded
 -(a) The supervisor of directed teaching.
 -(b) The principal of the university high school.
 -(c) The heads of high school departments.
 -(d) The supervising (critic) teachers.
 12. Provision should be made for an interrelationship (e.g., the department heads of the university high school teaching also in the education department, or liberal arts college) between the university high school and
 -(a) The education department.
 -(b) The related departments of the liberal arts college.
 13. The functions of a university high school over and above those of a public high school necessitates a comprehensive system of records andpupil accounting.
 14. Provisions for clerical assistance in the university high school should be sufficient for the following purposes:
 -(a) Adequate record keeping.
 -(b) Handling of routine matters in the principal's office.
 -(c) Stenographic work involved in the administration of the school.
 -(d) Relieving teachers of routine clerical work.
 -(e) Assisting department heads with professional correspondence.
 -(f) Assisting teachers with professional correspondence.
 -(g) Provide technical assistance in connection with statistical studies.
 -(h)
 15. Provisions for cooperative relationships between teacher training institutions and public schools should guarantee
 - (a) To the public schools
 -(1) Educational outcomes equal or superior to those formerly achieved.
 -(2) Final authority to public school officials in all matters affecting the welfare of the pupils.
 -(b) To the teacher training institution the right to do enough close supervision to assure the growth of the student teachers and the pupils.
 16. Provision for cooperative relationships between teacher training institutionsand public schools should be clearly defined in a written contract.
 17. The expense to the community incident to the operation of one or more co-operating laboratory schools should not exceed the expenditurenormally required for such a school or schools.
 18. The advantages to the community of the cooperative arrangements between the university and the public schools should be evident to thecommunity.

(Check here)

19. The university and the public school authorities should foster a well directed public relations program for the purpose of keeping the community informed with respect to the advantages offered bythe cooperative program.
20. The official relationship of the superintendent of a cooperating school system to the teacher training program should be recognized by the university as follows:
 -(a) By allowing college rank (assuming, of course, that he is qualified).
 -(b) By subsidizing the superintendent's salary.
 -(c) By making him a teacher in the education department.
21. The importance of the relationship of the principal of the cooperating high school to the teacher training program should be recognized by the university as follows:
 -(a) By allowing college rank (assuming, of course, that he is qualified).
 -(b) By subsidizing the principal's salary.
 -(c) By making him a part time teacher in the education department.
22. Supervising (critic) teachers working in cooperating public schools should be selected as follows:
 -(a) Selected by the university and approved by the public schools.
 -(b) Selected by the public schools and approved by the university.
 -(c) Selected by the university from the high school staff already employed.
23. The supervising (critic) teacher in any type of laboratory school should possess the following qualifications:
 -(a) Master's degree or the equivalent with major emphasis on the subject which he teaches.
 -(b) Knowledge of philosophy underlying modern teaching methods and educational activities.
 -(c) Understanding of philosophy underlying principles of supervision.
 -(d) Successful teaching experience.
 -(e) A disposition to influence constructively the educational activities of the state within his particular field.
 -(f) The attitude of an educational pioneer.
 -(g) A spirit restless in its search for improvement of present practices.
24. The student body (with respect to types of pupils) of a laboratory school should be
 -(a) Typical of a public school group.
 -(b) A select group with respect to superior intelligence.
 -(c) A group chosen to include a large number of problem cases.
25. Curricular and extra-curricular activities of a laboratory school should represent in practice that which is most generally accepted in theory.
26. Laboratory school facilities for summer school students should not be inferior to those of the regular session.
27. Laboratory schools should not be bound by state regulations with respect to

(Check here)

-(a) Organization (e. g., junior high school, senior high school, six year high school, etc.)
 -(b) Curricula.
 -(c) Textbooks.
28. The teaching load of the supervising (critic) teacher should be so reduced in amount and variety as to permit
-(a) An adequate schedule of conferences with student teachers.
 -(b) Extensive preparation for classes.
 -(c) Independent research.
 -(d) Investigations, under expert direction, of delimited problems affecting pupil instruction or teacher training.
 -(e) Advanced study.
29. A program of in-service training should be provided for supervising (critic) teachers with respect to
-(a) Pupil instruction.
 -(b) Student teacher supervision.
30. Recognition and rewards of the supervising (critic teachers should be great enough to attract the best teachers.
31. For the sake of pupil welfare, the student teacher, and the teaching profession, teacher training officials should make a consistent effort to discover standards whereby prospective teachers may be morehighly selected.
32. Student teachers should be required to do supervised teaching in
-(a) One subject.
 -(b) Two subjects (major and minor).
 -(c) Three subjects.
 -(d) Four subjects.
33. So far as possible, provision should be made for student observation and participation in those activities (in addition to directed teaching)which the beginning teacher may be expected to direct.
34. All observation and participation activities should be directed in accordance with a well defined program.
35. Observation, participation and directed teaching should be accompanied bya systematic effort to integrate theory and practice.
36. After completion of a course in observation, participation and directed teaching, the prospective teacher should have the opportunity of assuming for a period full control of a class in a typical public school situation with full responsibility for the results obtainedbefore a permanent certificate is awarded.
37. College credit allowed for observation, participation, and directed teaching should be commensurate with the time and effort required, and determined by the same standards as credit for academic andlaboratory work of the traditional type.

Directions for evaluating the following tentative principles: Rank the sub-items within each group below in order of preference. Use numerals to indicate rank. Let 1 represent first preference; 2, second preference; 3, third preference, etc. A numeral should be placed at the left of each sub-item.

(Insert numerals here)

38. Criteria to be considered in the location of the university high school (aside from the consideration of available space and money) are as follows:
 -(a) The type of pupil desired.
 -(b) Accessibility to pupils.
 -(c) Accessibility to student teachers and student observers.
 -(d) Accessibility to education department teachers.
 -(e) Landscaping possibilities.
39. Criteria for determining the size of a university high school building are as follows:
 -(a) Present need.
 -(b) Probable future need.
 -(c) Facilities available for directed teaching through cooperative arrangements.
 -(d) Pupils available.
40. Beyond the requirements for efficient instruction of pupils and efficient supervision of student teaching, an attempt should be made to make the university high school building
 -(a) A model high school building.
 -(b) A typical high school building.
 -(c) A building to meet the immediate peculiar needs for teacher training without regard for the similarity or dissimilarity to public school conditions.
41. The principal of the university high school should be directly responsible to
 -(a) Dean of the education department.
 -(b) Director of teacher training (If different from the supervisor of directed teaching).
 -(c) Supervisor of directed teaching.
 -(d) Head of department of secondary education.
42. Coordination of the functions involved in the administration of the university high school and directed teaching activities should be provided for
 -(a) By combining into one office the principalship of the high school and the supervisorship of directed teaching.
 -(b) By centering the responsibility for the coordination of these functions in the dean of the education department.
 -(c) By setting up a coordinating committee including the dean, the principal and the director of supervised teaching.
 -(d) By making the principal subordinate to the supervisor of directed teaching.
 -(e) By making the supervisor of directed teaching subordinate to the principal.
43. Final responsibility for the determination of the policies of the university high school (assuming of course that opinions of teachers and others concerned will be considered) should rest with
 -(a) Dean of the education department.
 -(b) Principal.
 -(c) Director of teacher training.

(Insert numerals here)

-(d) Supervisor of directed teaching.
 -(e) A committee (composed of)
44. As a general policy, where education departments have both a principal of the university high school and a supervisor of directed teaching
- A. Responsibility for curriculum policies should rest with
 -(a) The high school principal.
 -(b) The supervisor of directed teaching.
 - B. Responsibility for subject-matter supervision in the high school should rest with
 -(a) The high school principal.
 -(b) The supervisor of directed teaching.
 - C. Responsibility for matters of high school administration (aside from curriculum development and subject-matter supervision) should rest with
 -(a) The principal.
 -(b) The supervisor of directed teaching.
45. The methods of instruction in a university high school
-(a) Should be definitely influenced by a single instructional pattern; e.g., Dalton Plan, Morrison Plan, etc.
 -(b) Should be varied systematically for the purpose of giving prospective teachers a background for evaluating in an open minded way the methods receiving emphasis in a given system.
 -(c) Should be influenced by only one criterion; namely, results measured in terms of pupil achievement.
46. Special methods courses should
-(a) Precede student teaching.
 -(c) Follow student teaching.
47. It should be the aim of the program of student observation, participation, and directed teaching
-(a) To insure immediate success on part of the beginning teacher.
 -(b) To give the student an appreciation of the principles of correct practice as a basis of growth in teaching service.
 -(c) To insure a tolerable degree of immediate teaching skill and a basis of future growth in teaching service.
- In the next five items, please indicate your preference as to frequency of the types of conferences indicated. (Note: Check only the types of conferences which seem to you desirable.)
48. Regularly scheduled individual conferences between the student teacher and the supervising teacher should be conducted (encircle one numeral) 1, 2, 3, times a month, 1, 2, 3, 4, 5 times a week.
49. Regularly scheduled group conferences between the student teachers and the supervising teachers should be conducted (encircle one numeral) 1, 2, 3, times a month, 1, 2, 3, 4, 5 times a week.
50. Regularly scheduled group conferences involving all student teachers in a given subject-matter field should be conducted (encircle one numeral) 1, 2, 3, 4, 8 times a month.

(Insert numerals here)

51. Regularly scheduled group conferences including all student teachers of all subject-matter fields should be conducted (encircle one numeral)
.....1, 2, 3, 4, 8 times each month.
52. Regularly scheduled group conferences involving all student teachers and all supervising (critic) teachers should be conducted (encircle one numeral) 1, 2, 3, 4, 8 times each month.

COPY OF LETTER MAILED TO THE TEN UNIVERSITY HIGH SCHOOL
PRINCIPALS WHO ASSISTED WITH THE EVALUATING
OF ADMINISTRATIVE GUIDES

My dear Sir:

When I asked you to fill out a questionnaire for me a few weeks ago, I did not expect to make another request of you in connection with the same study. However, a study of the data obtained through questionnaires, North Central Association and other similar reports, professional literature, and conferences and observations at ten of the state universities have suggested certain guiding principles in the administration of laboratory schools connected with departments of education of state universities. It is this set of principles which I am trying to have validated.

With the assistance and advice of my graduate committee at the University of Michigan, it was decided that we should carefully select a small group of individuals from each of the following fields whom we would request to assist in the evaluation of the enclosed principles: deans of education departments; principles of university high schools; directors of supervised teaching. We were conscious of the fact that university high school principals had already been called upon for assistance in connection with this study, but it was unanimously agreed that such an important group could not be neglected in the validation of these principles. Since you were selected as one of the ten to represent the university high school principals' group, I trust you will find it possible to check the tentative principles for me.

In spite of the fact that this looks to be a long and tedious task, you will find that it can be done rather easily and quickly.

I am greatly indebted to you for what you have already done, and of course will appreciate very much this additional courtesy. I hope it will be possible for me to assist you in some future study when I get back into the harness again.

Very gratefully yours,

(Signed) A. M. JARMAN

¹In substance, the letters to Deans and Directors who assisted with evaluating of administrative guides were about the same as the one to principals.

DEANS, DIRECTORS AND PRINCIPALS WHO ASSISTED IN THE EVALUATION OF THE TENTATIVE ADMINISTRATIVE GUIDES

Deans

C. J. Anderson, University of Wisconsin.
E. J. Ashbaugh, Miami University.
W. W. Charters,¹ Ohio State University.
James B. Edmonson, University of Michigan.
Earl Huddelson, West Virginia University.
C. L. Hughes,² University of California (Berkeley).
James W. Norman, University of Florida.
B. F. Pittinger, University of Texas.
Henry L. Smith, Indiana University.
Willis L. Uhl, University of Washington.

Directors

Harold B. Alberty, Ohio State University.
H. B. Allman, Indiana University.
John W. Heckert, Miami University.
J. L. Henderson, University of Texas.
L. B. Hill, West Virginia University.
T. J. Kirby, State University of Iowa.
Charles Rugh, University of California (Berkeley).
F. S. Saulsbury, Ohio University.
Raleigh Schorling, University of Michigan.
Charles W. Waddell, University of California (Los Angeles).

Principals

P. M. Bail, State University of Iowa.
Charles W. Boardman, University of Minnesota.
Charles H. Butler, University of Missouri.
George H. Colebank, West Virginia University.
Edgar G. Johnson, University of Michigan.
R. U. Moore, University of Oregon.
Wm. H. Morton, University of Nebraska.
George A. Rice, University of California (Berkeley).
H. H. Ryan, University of Wisconsin.
Lewis W. Williams, University of Illinois.

¹ Checked for Dean George F. Arps.

² Checked for Dean W. W. Kemp.

APPENDIX D

LIST OF PUBLICATIONS USED IN THE CONSTRUCTION OF TABLE XIV

- COLEBANK, GEORGE H. "Practice Teaching in the Colleges of the North Central Association," *The North Central Association Quarterly*, III (December, 1928), 376-431.
- DONOVAN, H. L. "The Twofold Purpose of the Teachers College," *The Journal of the National Education Association*, XIX (December, 1930), 305-6.
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APPENDIX E

STATE LAW PROVIDING FOR THE WEST VIRGINIA UNIVERSITY
DEMONSTRATION SCHOOL

An Act to Enable Cass, Grant and Union Districts, Monongalia County, to Assist in the Erection and Equipment of a High School Building on the Lands of the West Virginia University in Morgantown, By Laying a Levy of Twenty-five Cents During Each of the Two Years Immediately following the Approval By the Voters of Said Districts, to Assist in the Erection and Equipment of Such High School

Be it Enacted by the Legislature of West Virginia:

SECTION 1. Cass, Grant and Union magisterial districts, Monongalia county, are hereby enabled and directed to lay a levy of twenty-five cents during each of the two years immediately following the approval by the voters of said districts, to assist in the erection and the equipment of a high school in Morgantown, on the lands of the West Virginia university at Morgantown. The boards of education of the districts participating in the construction and equipment of this high school, shall have the right to levy and erect such additions and buildings as they may deem necessary to provide adequate facilities for future increased enrollment at such high school.

SECTION 2. The department of education of West Virginia university under the direction of the state board of education and the state board of control of West Virginia is hereby empowered and directed to have general control and supervision of such high school.

SECTION 3. An advisory board of education composed of the county superintendent of schools of Monongalia county and the presidents of the boards of education of the districts participating in the building of such high school is hereby created.

Said board shall represent the interests of the various districts participating; shall advise concerning the budget for each current year, or proposed budgets for ensuing years; shall advise concerning courses of study, graduation requirements, and participate in deciding questions affecting changes in the policy of the school.

SECTION 4. The instructors and instruction of such high school must be superior to that of the average high school. The school shall be used for the directed teaching and observation work of the department of education of the West Virginia university, but at least fifty per cent of each high school student's class work must be done under the personal direction of regular high school teachers. The remaining fifty per cent of instruction may be under the direction of regular high school teachers, or regular members of the department of education in the university.

SECTION 5 All elementary school graduates and a limited number of seventh and eighth grade pupils who are actual residents of any one of the school districts participating in the building of this high school shall have the right and privilege of enrolling in this high school; provided, the boards of the respective districts approve of the enrollment of the seventh and eighth grade pupils and the school can provide for the seventh and eighth grade pupils.

SECTION 6. The boards of education of the residents' districts of such pupils shall pay for maintenance and instruction of said high school a tuition fee of one-half of the average per capita cost for instruction and maintenance of the high schools of West Virginia as ascertained by the last preceding report of the state superintendent of schools of West Virginia. The state

board of education and the state board of control of West Virginia, shall provide the remainder of the maintenance and instruction.

SECTION 7. Other students may be permitted to enter this high school at the discretion of the advisory board of education of this high school, but such students shall pay the tuition fees charged by such advisory board of education; provided, no student in a district maintaining a high school may be admitted except on the approval of the advisory board and of the department of education in the university.

SECTION 8. The name of this high school shall be "University Rural High School." The university rural high school shall be dedicated to the memory of Alexander L. Wade.

SECTION 9. The curricula and courses of study of said high school shall conform in general to the requirements of the state board of education and be suitable to the pupils of the districts represented.

SECTION 10. The board of education of each of the aforesaid districts shall call a special election on petition of ten per cent of the voters of said districts after this act becomes a law to determine whether or not the voters of such district will approve the laying of a special levy of twenty-five cents for each of the two years immediately following the approval of the voters of said districts. The board shall call other elections on petition of ten per cent of the voters to decide, in the event of a failure on the part of a majority of those voting in any one district to approve of the laying of said levy. In the event of a second failure to authorize the laying of said levy the board shall call subsequent elections upon the petition of ten per cent of the voters of the district. A majority of the voters participating at the special election shall be necessary to authorize such board of education to lay such levy and proceed to carry into effect the provisions of this act. The election shall be conducted in accordance to the general law regarding special elections called by the boards of education.

SECTION 11. If any of the following school districts, Cass, Grant or Union, fail to approve the levy authorized by this act, the boards of education of the district or districts approving such levy shall be authorized to lay said levy, if in the judgment of the boards of the district or districts approving such levy the building and equipment can be provided.

SECTION 12. If the voters of any or all of the aforesaid school districts authorize such levy, the boards of education of their respective districts are hereby directed to lay such levies and in conjunction with the state board of control and the state board of education to proceed immediately to erect and equip such high school. The state board of control shall award the contract for erecting the building and properly supervise the construction. The state board of control shall have plans prepared for such building in consultation with the department of education of the West Virginia university. The advisory board of education shall approve the plans of such building and the contract for the construction of such building. Upon the direction of the state board of control, in order to meet the various payments required by the construction contract, the advisory board of education will issue orders on the sheriff of Monongalia county for the payment of the various estimates and bills required in building and equipping this high school building.¹

¹ Acts of the West Virginia Legislature for 1927, Chapter LXXI.

MISSISSIPPI STATE LAW PROVIDING MEANS AND METHODS FOR THE
UNIFORM OPERATION OF DEMONSTRATION AND
PRACTICE SCHOOLS

*An Act Recognizing the Right of the Respective Major State Institutions of
Learning of Mississippi to Operate in Connection Therewith Teachers'
Demonstration and Practice Schools; Providing Means and
Methods for the Uniform Operation Thereof*

SECTION 1. BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MISSISSIPPI, That the right and authority is hereby recognized and conferred upon the respective administrative authorities of the Major State Institutions of Learning in Mississippi to operate, maintain and conduct Teachers' Demonstration and Practice Schools in connection with such institutions. In conducting the affairs of such Teachers' Demonstration or Practice Schools, power is hereby conferred upon the authorities aforesaid to lawfully regulate the affairs of such schools. The aforesaid authorities in cooperation with and having the approval of the Boards of Trustees of any of the respective school districts so cooperating and/or the County Superintendent of Education and/or County School Board as the case may be shall determine what grade, or grades, or parts of grades of said districts from which such students may be admitted.

SECTION 2. It is hereby made the duty of the Secretary of the Board of Trustees of the District, or the County Superintendent of Education of the County, as the case may be, wherein the students who are in attendance upon such practice school reside, and he shall pay into the designated treasury of such school, with the approval of the respective Boards of Trustees and the County Superintendent, the amount of money that would be otherwise paid by him out of the common school fund to the particular rural separate school fund, consolidated school, or other school district wherein such students reside; and if there be other funds, properly belonging to the area, zone or district for instructional purposes, heretofore or hereafter coming into the hands of the Secretary of the Board of Trustees or County Superintendent; or any funds for instructional purposes, heretofore or hereafter, lawfully available to the school trustees of such area, zone or district; and the same shall likewise be deposited to the credit of the treasury of such teachers' demonstration or practice school. If the total of such funds available or to be made available do not provide the minimum charges herein required, then the child or its parents may supplement same in order to secure the superior training given at such practice school.

SECTION 3. That it is hereby made the duty of the administrative authorities of the aforesaid respective Major State Institutions of Learning to forward to the State Treasurer to be deposited in a special fund to the credit of the institution forwarding the same, the following minimum per capita charge per month:

For Grammar Grade Students	\$4.00
For Junior High School Students	\$5.00
For High School Students	\$6.00

from the available funds coming into the treasury of such schools from the sources aforesaid, and this shall supplement the funds made available hereafter by Legislative appropriation for the conduct and operation of such Teachers' Demonstration or Practice Schools, and shall be paid out for the same purpose and in the same manner as the regular appropriation for such Demonstration or Practice Schools, which schools shall be operated for a period of not less

than eight months in each scholastic year. In case the Board of Trustees, or the County Superintendent of Education, or the County School Board, as the case may be, does not agree to cooperate and release the per capita cost of students desiring to attend such demonstration or practice schools, such students may become students of the aforesaid school, provided the child or its parents pays the minimum per capita charge per month as provided above or such part of that charge that is not released by the Board of Trustees, the County Superintendent of Education, or the County School Board, as the case may be.

SECTION 4. The administrative authorities aforesaid may prescribe a uniform student admission fee for attendance upon such school, and the administrative authorities aforesaid may levy an additional student per capita tuition fee, in addition to the minimum State tuition fees named in the foregoing section and collect the same from such students or their parents, such collection to be made and receipted for by the designated treasurer of each said school and deposited to the credit thereof.

SECTION 5. The general school laws of the State of Mississippi relative to raising funds for the operation and maintenance of public schools, and/or the transportation of students, so far as applicable, are hereby made available to the school trustees of any school area, zone or district from which the students are in attendance upon one of the Teachers' Demonstration or Practice Schools aforesaid, in raising and utilizing such school funds and in carrying out the duties and obligations devolving upon the County Superintendent and such Trustees under the provisions of this act; subject in every case to the approval of the County Superintendent, or County Superintendents, as the case may be. It is hereby made the duty of the trustees of any district where necessary to provide transportation for such educable students of their respective districts to and from school while in attendance thereat, under lawful rules and regulations of the Boards of Trustees of the respective Major State Institutions of Learning.

SECTION 6. That "Major State Institutions of Learning in Mississippi," as herein used are hereby defined to be such institutions of learning now or hereafter established and maintained by the State of Mississippi for the academic and collegiate education of the youth in this State, which institutions have now, or shall hereafter be recognized as a standard college by the State Board of Education. Instructors in Teachers' Demonstration and Practice Schools shall be required to hold a regular teacher's license.

SECTION 7. That if any section, paragraph, sentence or clause of this act shall be rendered inoperative by the decision of a court of competent jurisdiction, the same shall not affect, impair or invalidate the remaining sections, paragraphs, sentences or clauses thereof.

SECTION 8. That this act to take effect and be in full force from and after July 1, 1930.*

* Laws of Mississippi, 1930, Chapter CCXVIII.

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